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BRITISH BIRDS

AN ILLUSTRATED MAGAZINE DEVOTED
TO THE BIRDS ON THE BRITISH LIST

59,82,106(42)

EDITED BY

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PREFACE.

THE return of the Bittern as a nesting species to Norfolk, so ably chronicled by Miss Turner, has afforded the most striking and important event of the year covered by this fifth volume of BRITISH BIRDS. To regain a former breeding species, or to gain a new one, is of far greater interest and value than to discover a new "straggler," although the importance of such additions to our list of British birds must not be minimized, for in these days of close watching and wider knowledge, it soon appears that many of these seeming "stragglers" are much more often overlooked than detected, and their occurrence may not be so accidental as has been thought.

We have always believed that much can be achieved in the study of birds by co-operation in observation, and in this connexion we may point to the account of the Distribution of the Nightingale, and the "Wreck" of the Little Auk, besides the very excellent and increasingly valuable results which have been the outcome of the Marking Scheme.

Before the next volume commences our promised Hand-List (see Preface to Volume IV.) will be published, and we are hopeful that the distributional accounts there given may bring forth fresh observations where our knowledge is now faulty or lacking.

In the Introduction to the Hand-List, we have given fully our reasons for adopting the International Rules of Zoological Nomenclature by which the scientific names employed are governed, and to this we must refer those who wish to go closely into the question. But as we shall follow in future in BRITISH BIRDS the nomenclature of this Hand-List, it is due to our readers to give our main reasons for adopting this Code which produces many

changes in the scientific names hitherto used in the magazine. British birds are best known to British ornithologists by their English names, and probably to the majority of our readers the scientific names are of no importance, since they know exactly to which bird the English name refers. But ornithology is world-wide, and it is necessary for that reason alone, apart from systematic classification, to employ scientific names. Almost every bird has, unfortunately, been given at one time or another more than one scientific name. It is obviously of the utmost importance that one of these names shall be adopted universally. How else can this desirable end be reached except by the strict adherence to a code of rules having international authority? These are, in brief, our reasons for having adopted the International Rules, and we are confident that in the near future our brother ornithologists all over the world will look at this question in a broad-minded way, and will cease to insist upon their individual opinions, and will sacrifice their personal convenience, for the benefit of Ornithology.

THE EDITORS.

April 20th, 1912.

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ON THE DISTRIBUTION OF THE NIGHTINGALE DURING THE BREEDING SEASON IN GREAT BRITAIN.

BY

N. F. TICEHURST AND THE REV. F. C. R. JOURDAIN.

INTRODUCTORY.

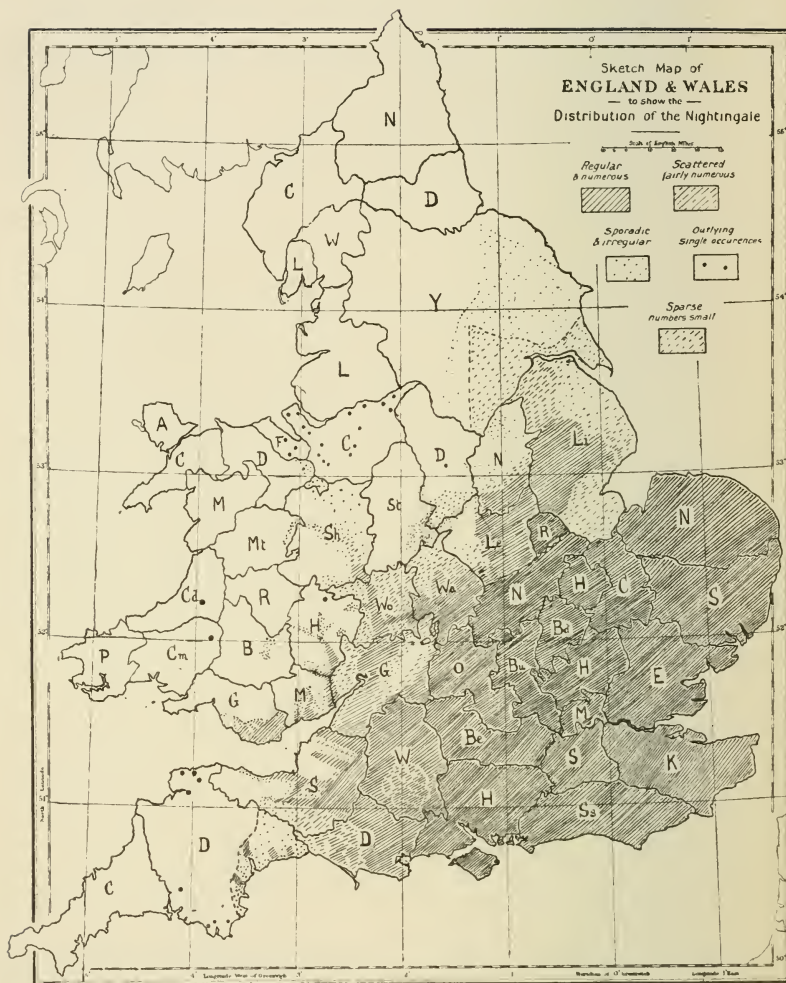
IN the south-eastern counties the Nightingale (*Daulias lusciniæ*) is of general distribution, although even here there are certain localities where it becomes scarce or is altogether wanting. Thus it is a scarce bird on the Chiltern Hills in southern Oxfordshire and Buckinghamshire, and also on the high ground of the Marlborough Downs and the treeless expanse of Salisbury Plain, while even in Kent it is less numerous above 500 feet. Still, it is unnecessary to go into detail in the following counties : Kent, Sussex, Surrey, Hampshire, Middlesex, Berkshire, Oxfordshire, Buckinghamshire, Hertfordshire, Essex, Suffolk, Norfolk, Cambridgeshire, Bedfordshire, Huntingdonshire, and Northamptonshire. In Wiltshire it is also tolerably general in all suitable ground, but avoids the high downlands and open plains, where cover is lacking. Rutlandshire may also be included among the counties where it breeds regularly, and the present inquiry has been chiefly devoted to those counties which lie on the edge of its range, or where the distribution is local only.

These include Devonshire, Dorsetshire, Somersetshire, Gloucestershire, Monmouthshire, Glamorganshire (Carmarthenshire and Cardiganshire), Brecknockshire, Radnorshire, Herefordshire, Worcestershire, Warwickshire, Montgomeryshire, Shropshire, Staffordshire, Derbyshire, Leicestershire, Lincolnshire, Nottinghamshire, Yorkshire, Cheshire, Denbighshire, and Flintshire, and possibly Lancashire, Durham, and Northumberland. These we will now proceed to consider in detail, as the Nightingale is entirely absent from the other counties not mentioned here.


Many theories have been advanced at different times to account for the irregular distribution of this species, such as


the presence of a heavy, clayey soil, as opposed to a light, sandy one, being necessary to its welfare. Walcot voiced a popular belief in the south of England, that it is only to be met with "where the cowslip grows kindly." Many people in the Midlands believe that it is unable to cross the Trent. But the study of the following details covering the distribution in each county will, we think, leave little doubt in the minds of our readers that the real obstacles which prevent the general distribution of this species over the greater part of England and Wales are the ranges of elevated land, which it instinctively avoids. Even in counties like Oxfordshire or Berkshire, which lie well within its breeding-limits, it is common only in the wooded lowlands. On the Lambourn Downs in Berkshire, along the Chilterns in Oxfordshire and Buckinghamshire, and on the Cotswolds, it is practically unknown. But these isolated masses of hills and downs of no great height do not interfere with the gradual dispersal of the species by means of the river-valleys. The more important mountain-systems, on the other hand, rising to heights of 1,000 feet or more, present insuperable obstacles. In the Devonian peninsula the high plateau of Exmoor on the north and Dartmoor on the south, mark the western limits of the species, except where a few birds have skirted the coast line and reached the Tamar valley. Similarly the great Cambrian system, extending from the Berwyns south through Montgomery, Radnorshire, and Breconshire to Glamorganshire, with outlying spurs in Shropshire, form an impassable barrier on the west.* From the northern counties the great Pennine Chain, the backbone of England, reaches down into the West Riding of Yorkshire, east Lancashire, and north Derbyshire, while high-rolling plateaux occupy parts of north Staffordshire and west Derbyshire. The limits of this system practically mark the northern range of the Nightingale. On the west side a comparatively small stream of migrants work their way up from the Severn valley

* In South Wales, however, a migratory stream passes along the north coast of the Bristol Channel westward, avoiding the mountains of Glamorganshire, and a pair or two appear to have penetrated up the Towy valley as far as Llandovery, and it is said to have been once heard in the Teifi valley.



Sketch Map of
ENGLAND & WALES
— to show —
Orographical Features

 Land between 500 and 1000 feet

 Land over 1000 feet



into Cheshire, while on the east side larger numbers work their way down the broad vale of Trent and along the Lincolnshire border into the eastern half of Yorkshire, from Huddersfield to Teesmouth eastward.

A large number of ladies and gentlemen have taken considerable trouble in answering our questions and collecting information. Without the kind help thus furnished, it would have been impossible to produce an account of the Nightingale's distribution with any pretence to accuracy; in addition, therefore, to those mentioned in the following pages, we desire to express our indebtedness to Mr. E. R. Bankes, Mrs. R. G. Beecheno, Mr. T. J. Beeston, Mrs. E. L. Calcraft, Messrs. F. Coburn, C. F. Davies, H. M. Dodington, A. H. Duncalfe, Harold Evans, W. F. Evans, N. G. Hadden, Major G. Haines, Rev. C. Homan, Messrs. F. A. Knight, A. G. Leigh, and Stanley Lewis, Miss G. Lister, Mr. H. W. Mapleton, Col. H. Meyrick, Messrs. C. J. M. Packe, R. Perkins, W. J. P. Player, C. Pym, V. Ransome, N. G. Richardson, E. S. Rodd, J. Rodley, G. N. Sowerby, Joseph H. Symes, James Turner, and T. W. Wilson.

DEVONSHIRE.—The presence of Nightingales in Devonshire has for so long been looked upon by the public as something out of the ordinary, that their occurrence seems seldom to have passed unrecorded. These numerous records have been carefully gone into from time to time by Messrs. W. S. M. D'Urban, Murray A. Mathew, E. A. S. Elliot, and other Devon ornithologists, so that it is a comparatively easy task to define, on broad lines, the breeding-range of the bird in this county. If a line be drawn from Dartmouth through Totnes, Ashburton, Lustleigh, Dunsford, Crediton, and Tiverton to Bampton, near the Somersetshire border, this will represent tolerably accurately the western boundary of its breeding-range. (It is perhaps worthy of note that a continuation of this line northwards to Watchet also marks off fairly accurately the western boundary in Somerset.)

To the east of this line the bird is entirely confined to the river-valleys, and breeds regularly in those of the Teign, Exe, Otter, and Axe, and, occasionally, at a few spots on the coast between the Dart and the Dorsetshire border. Its numbers are greatest about Bovey and Trusham in the Teign valley, and this may be said to be the largest colony in Devonshire, the

neighbourhood of Exeter (Stokewood) being the locality where they are the next most numerous. To the west of the line above-mentioned, the Nightingale has only occurred sporadically, the most westerly record being one from Horrabridge, only a few miles east of the Tamar, which forms the Devonshire and Cornwall boundary.

To Mr. W. S. M. D'Urban, who has kindly revised the above statement, we are indebted for some further interesting information with regard to this bird's distribution. Contrary to popular belief, it would appear that there is no evidence of any real increase in its numbers, or in the area it occupies in Devonshire, for wherever the bird is now known to breed, inquiries seem to indicate that it has always been there. With regard to its numbers, these have always varied greatly from year to year, and any actual increase that has taken place of late years is wholly accounted for by the protection now afforded them, and the stopping of the "catching" that was formerly very prevalent, particularly in the neighbourhood of Exeter. Its numbers are never very great, and in some years the birds are probably much less numerous than in others.

With regard to the factors in its distribution, Mr. D'Urban refers to an old idea, that the area occupied by it corresponded with the distribution of the cowslip, but points out that while this is roughly true, the cowslip is absent in the Nightingale's chief haunt in the Teign valley. The chief factors limiting its westward spread are no doubt the high land (unsuited to its habits) of Dartmoor and Exmoor, while its need for shelter from the prevailing north-westerly winds, and its liking for thick copses, practically limits its distribution to the river-valleys and certain sheltered spots near the coast.

Mr. D'Urban also suggests that the presence or absence of the wood-ant (*Formica rufa*), on the pupæ of which the young are largely fed, and the abundance of whortle-berries, particularly in the oak-copses of the Teign, also have some bearing on the Nightingale's distribution in Devonshire.

DORSETSHIRE.—Although the Nightingale is generally distributed throughout Dorsetshire, Mr. W. Parkinson Curtis points out to us that the distribution is by no means an even one. Large areas occupied by the drift-gravel plateau, and other similar formations, are characterized by large fir-woods with, in some districts, copses of birch, poplar, oak, and some elm. Here the Nightingale would appear to be quite scarce, while in the chalk districts the woods abound with rich undergrowth, and Nightingales are numerous, and, in some years, very abundant. While still common in suitable localities in

the west of the county, there seems to be no doubt that on the whole its numbers are less than in the east. The normal yearly fluctuations in numbers would, therefore, be more apparent in the west than in the east; at the same time there seems to be some ground for saying, that there has been a slight increase in the west during the last thirty years.

SOMERSETSHIRE.—There seems to be ample evidence that the Nightingale has increased greatly in numbers during the last thirty years, and is still increasing throughout those parts of the county of Somerset where it is found, while at the same time it is slightly extending its range westwards.

It appears to be most numerous and generally distributed, particularly in the river-valleys, in the east and south-east of the county, from the Wiltshire and Dorsetshire borders to as far west as a line through Wells and Glastonbury. In the extreme south, about Chard, near the Devonshire border, however, its distribution becomes more patchy, and although increasing, its numbers are comparatively small. These increase, however, a little further north, about Ilminster, to become large again, further north still, as the Vale of Taunton is reached.

North of the Mendips it is less numerous, but still generally distributed throughout the county between these hills and the valley of the Avon. Immediately south of Clevedon the country appears to be unsuited to its habits, and it only occurs sporadically about Weston. Along the southern slopes of the Mendips, in certain sheltered copses and passes leading through them, the Nightingale is sparingly distributed, though in very variable numbers year by year, but becomes more numerous and regular, both in numbers and distribution, as one passes eastwards up the valley of the Axe towards Wells. It is along this valley that a definite westward spread has taken place within comparatively recent years.

Between the river Axe and the Polden Hills lies the alluvial tract known as the "Peat Moors," which extends from the shores of the Bristol Channel to just beyond Glastonbury; in this area the Nightingale appears to be known only as a passing migrant, the fact of its being unknown as a breeding-bird being probably solely on account of the lack of suitable breeding-haunts in this district. In certain parts of the Polden Hills, e.g. about Walton, the bird seems to be particularly numerous, and is fairly common around Bridgwater, between these hills and the Quantocks. To the south-west of Bridgwater its distribution appears to follow fairly accurately the fertile valley of the Tone, round the foot of the Quantocks, where, in the neighbourhood of Taunton, the bird is a well-

known, numerous, and increasing visitor. West of Taunton its numbers begin to thin out, and it becomes scarce to the west of Milverton and Wellington, while about fifteen miles west of Taunton, near the Devonshire border, it is almost, if not quite, unknown. In the Exmoor country and the adjacent district as far east as the Quantocks, the Nightingale is quite unknown, and correspondents long acquainted with this area inform us that they have never known of one being seen or heard. The only exceptions to this statement are the recent records from the neighbourhood of Minehead, on the north coast, and these furnish interesting evidence of the westward spread of this bird—thus they were heard at Carhampton, four miles east of Minehead, in 1900, and at Dunster, two miles east of Minehead, and Tivington, two miles west of that town, in 1903. This last would appear to be the farthest westward point at which the Nightingale has bred in Somerset. The Rev. R. Chichester, of Minehead, now informs us that in 1905 or 1906 there were at least five pairs of birds close by Dunster, but that, although in most years now there is one pair about Dunster or Carhampton, its visits are not yet regular, and some seasons pass without a Nightingale being heard. Reports from the Porlock neighbourhood, slightly further west, appear to lack substantiation.

GLOUCESTERSHIRE.—The distribution of the Nightingale in this county has been worked out as recently as 1902 by Mr. W. L. Mellersh, in his *Treatise on the Birds of Gloucester*, so that it is not necessary to do more here than summarize what he there says. He points out very clearly that the distribution is entirely dependent on the physical conditions of the country. On the Cotswolds, as a whole, the bird is scarce, while on the higher portions, although there are many snug valleys with copses apparently suitable for it, it is a great rarity, owing, probably to the frosty nights of April and May at this elevation. In the north-west of the county it is not common in the woods themselves, but outside, amongst the open valleys and copses between the Forest of Dean and Tewkesbury, it is more numerous than in any other part. In the Severn Vale, while it is only less numerous than about Tewkesbury, its haunts are chiefly confined to a narrow belt between the Cotswolds and the Vale, including the little valleys that ascend a short way up into the hills.

MONMOUTHSHIRE.—For information about this county we are mainly indebted to Mr. Iltyd Gardner, of Abergavenny, who states that the Nightingale is distributed fairly regularly all over Monmouthshire *for so irregular a bird*. It is clear,

however, from the details which he gives, that as in Herefordshire, its distribution is mainly dependent upon the river-valleys; thus it occurs most frequently and abundantly in the Wye Valley, on the eastern border of the county, and thence less abundantly along the Herefordshire border formed by the Monnow, as far as the outlying localities mentioned under the latter county. Nightingales are also fairly numerous along the valley of the Usk as far north as Llanover, a few miles south of Abergavenny, and occur, and have done so for more than thirty years, according to Mr. R. C. Banks, as regular visitors in some numbers around Newport, in the lower part of the valley. It seems probable from Mr. Gardner's statements, that the Nightingale is found sporadically in suitable localities along the several branches of the river Usk between Newport and Abergavenny, but exact information is wanting, as it is also for the western mining district, though as regards this locality, the presence of the bird is perhaps less probable.

GLAMORGANSHIRE.—The Nightingale seems to have made its first appearance in Glamorganshire about the year 1868, and there is no doubt that it has gradually established itself, and has increased largely in numbers, especially during the last ten years, in the south-east of the county. It has often been stated that Bridgend forms the westward limit of its range, but there are records of its breeding in several localities, within the last three years, between Bridgend and Port Talbot, so that the bird would appear to be slowly spreading along the coast.

The distribution in Glamorgan would seem to resemble somewhat that in Devonshire. Thus it occurs in all the river-valleys between the eastern boundary and Port Talbot, about as far inland as the Great Western Railway line from Cardiff to Bridgend, and at many suitable spots near the coast within this boundary. It is specially numerous in the Vale of Glamorgan, round Beaupre and Llandough, round Cardiff (where its numbers have been put, in 1910, at between twenty and thirty pairs, within a seven mile radius of the centre of the city), and in the flat country to the north of Cardiff about Llanishen. In the latter district the Nightingale ranges further north than elsewhere in the county, and has been reported within the last three years from the Rhondda Valley. Reports from further west, in the Swansea neighbourhood, have not yet been verified.

CARMARTHENSHIRE.—Mr. A. Gwynne Vaughan informs us that, in the year 1898 a pair of Nightingales built a nest and laid eggs, five miles north of Llandovery in this county, but

did not succeed in rearing any young. This seems to be the only occurrence of the Nightingale in Carmarthenshire.

CARDIGANSHIRE.—In the *Field* for July 9th, 1910, Mr. Max A. Wright records the fact that in the previous June he heard a Nightingale singing three miles south of Tregaron (presumably in the valley of the Teifi). The recorder appears to be well acquainted with the bird's song in Glamorganshire, and Mr. Harold Evans has also written to us about the record, which he describes as "quite authentic," so that in spite of the fact that the locality is far to the north-west of any previous record, it may, we think, be trusted. This individual bird was, of course, only a casual wanderer, and a single record such as this cannot be taken as indicating any real extension of range.

BRECKNOCKSHIRE.—With regard to this county, it seems clear from a consideration of the bird's distribution in Herefordshire and Monmouthshire, and the general physical features of the country, that if the Nightingale is to occur here at all, it would be most likely to do so either along the Usk or along one of the feeders of the Wye. On turning to Mr. Cambridge Phillips's *Birds of Brecon*, we find that this is pretty well what does happen, for there he refers to a popular local saying, that the Nightingale is never heard to the west of the Bwlch (i.e. about eight miles east of Brecon), and adds that although he has heard the bird near Brecon, he is disposed to believe that there is a great deal of truth in the saying.

At the same time, the normal northern range of the Nightingale in the Usk Valley is some considerable distance south of the Brecon border, while on the Herefordshire border on the Wye the bird is quite rare, so that it is not to be expected that it should occur in any numbers, or with any regularity, even in that portion of Brecon defined above. This is well illustrated in the case of the pair of birds referred to in the *Birds of Brecon*, which nested at Talgarth in the north-east of the county a few years prior to 1899; they did not appear the following year, but the same or another pair did a year or two later, and continued to do so on and off, as Mr. Cambridge Phillips informs us, up till 1907; since then he has not heard one, nor heard of one being seen.

From the rest of the county we have no certain information of the Nightingale ever having occurred, but should it do so it is only likely to be an odd straggler.

HEREFORDSHIRE.—In H. G. Bull's *Birds of Herefordshire*, published in 1888, the Nightingale is described as varying much in numbers, not at all abundant, and almost confined to the southern half of the county. In 1889 Mr. T. Hutchinson

compiled a list of Herefordshire birds for the *Transactions of the Woolhope Club*, and this gentleman has been kind enough to provide us with a list of the localities from which he had received well-authenticated records of the bird, together with information that has reached him since; he adds that he has no doubt that the bird is gradually extending its range towards the west, and that, from the length of time it is stated to remain, he has no doubt that it breeds in the county, but that he had not been able to hear of a nest actually having been found. Mr. A. B. Farn, of Breinton, near Hereford, however, tells us that a pair reared their young at Norton Common in 1908.

Taking Mr. Hutchinson's surmise as approximately correct, it is clear from the records that the distribution of the Nightingale in Herefordshire follows very closely the river-valleys. It is found in its largest numbers (Mr. Cambridge Phillips says in fair numbers yearly, and sometimes numerous) in the valley of the Wye as far north as a few miles south of Hereford. About Hereford it occurs less regularly, and its visits become less frequent and its occurrence more sporadic as the river is followed westwards, until about Hay, on the Breconshire border, Mr. Cambridge Phillips describes it as distinctly rare.

In the south-west Nightingales have occurred at several localities near the junction of the valleys of the Monnow and Dove, close to the Monmouthshire border, but their visits seem to be irregular, and probably represent the outposts of the bird's distribution along the valley of the former river, from its junction with the Wye at Monmouth.

From the north of Herefordshire there are several records from the valleys of Lugg and the Frome, which point to a gradual extension of range up these rivers. There do not seem to be any authentic records from as far north as Leominster, and from the Arrow and other rivers that here feed the Lugg from the west, there is definite information that the Nightingale has not yet been found along them. The localities in the east of the county from which it has been reported, besides those in the Frome valley, lie in the valleys of the Leadon and Teme, and suggest that the bird is spreading west from Gloucestershire and Worcestershire along these rivers.

There remains a single locality, Kimbolton in the north of the county, which appears to be widely separated from any other established centre in Herefordshire. Birds appear to have occurred there for some years past, and it is stated that numbers of people journeyed up there from Leominster to hear

them singing in 1908 and 1909, while in some years as many as three or four could be heard singing at once. It seems probable that these birds represent an "overflow" from the valley of the Teme where, in the neighbouring district of Worcestershire, the Nightingale breeds fairly regularly.

WORCESTERSHIRE.—Though somewhat irregularly distributed the Nightingale does not appear to be absent from any large area. It is most plentiful in the valleys of the Severn, Avon, and Teme, and such parts of their tributaries as run through low and fertile places. The higher and comparatively barren regions of the county are seldom visited. Its numbers vary greatly from year to year, but it is said to have increased much within living memory in the south-east of the county. Its visits to the Malvern district, on the Herefordshire border, would appear to be irregular.

WARWICKSHIRE.—Warwickshire being one of those counties that still lacks a book devoted to its fauna, detailed information has been a little hard to come by, and being near the western boundary of the Nightingale's range, it would be desirable to work out its distribution with greater accuracy than is at present possible. It will be fairly correct, however, to say that over the greater part of the county, as far north as the latitude of Birmingham, the bird is generally, and fairly numerous, distributed. It occurs in greatest numbers in lower-lying alluvial tracts, e.g. below 200 feet in the valleys of the Avon, Arrow, and Stour, in the southern division of the county. In the northern half it is decidedly less numerous, though still uniformly distributed up to Birmingham, while in this area its numbers are largest in the valley of the Blythe, below 300 feet. North of Birmingham information is very scanty, and it seems probable that its distribution thins out rapidly, as Mr. Steele Elliot regards it as a rare bird at Sutton Coldfield, near the Staffordshire border. There seems to have been a steady increase in numbers throughout the southern two-thirds of the county during the last ten years.

MONTGOMERYSHIRE.—All the occurrences of the Nightingale within the county-limits are from the Severn Valley, between where the river flows into Shropshire and a few miles above Montgomery. The most southerly locality is Abermule, where it was heard for two or three years by the Severn (Rev. F. O. Philpott). At Leighton it was heard singing in May, 1900 (Bruce), and about 1869 another was frequently heard at Guilsfield, near Welshpool (Beck). Near the junction of the Fyrnwy and Severn one or two pairs haunt the Shropshire border near Kinnerley (H. E. Forrest).

DENBIGHSHIRE AND FLINTSHIRE.—Mr. H. E. Forrest's collected notes and observations in his *Fauna of North Wales*, show that the Nightingale is certainly a visitor at irregular intervals to the southern part of Flintshire, and the outlying portion, as well as on the eastern border of Denbighshire, where it marches with that of Flintshire. In the outlying part of Flint, Mr. Forrest quotes records from the borders near Ellesmere, Malpas, and Penlly, while it occurred at Overton in 1902 and 1905. In east Denbighshire it has frequently occurred near Wrexham, and also at Gresford, Rossett, and the Nant-y-ffrith Woods, while in Flintshire it has been recorded from Colomondy, Mold, Gredington, and Holywell.

SHROPSHIRE.—Mr. H. E. Forrest's researches have shown that the Nightingale occurs regularly in the south of the county, mainly along the Severn Valley, between Bewdley and Buildwas, specially affecting the neighbourhood of Bridgnorth, Linley, and Broseley. Beyond these limits it is of very irregular occurrence, but in some seasons extends its range northward to Shrewsbury or a few miles beyond, but still keeps chiefly to the Severn Valley. The limits of its range, however, as well as its numbers, fluctuate considerably from year to year. In 1902 at least six pairs nested close to Shrewsbury, while in 1909 Mr. Forrest only knew of one pair which reared their young, though one or two more were reported. As a rule they keep to the valley, and on both sides it is extremely rare to find them at any distance from the river. The elevated plain which occupies the northern part of the county and extends into Cheshire and Staffordshire, is also avoided, as a rule. There are, however, a few records of birds observed here: thus a pair was recorded from Hadnall in 1900, a nest was found at Grinshill, and a pair noticed at the Clive in 1902, while in 1905 others were reported from Wem. On the west side it has been met with at least three times at Kinnerley, on the Welsh border, and on the east side, in 1908, about ten miles from Wolverhampton (*Zool.*, 1909, p. 74); while two pairs nested two miles nearer Wolverhampton in 1907 and 1909 (A. H. Duncalfe). In the southern part of the county a pair or two apparently find their way up the Teme valley, as Mr. O. R. Owen records a pair having reared young at Ludlow in 1906, and Mr. Forrest mentions another pair at Onibury in 1905.

STAFFORDSHIRE.—At first sight, judging from its geographical position, one might expect the Nightingale to be a regular and widely distributed summer-visitor to Staffordshire; but a study of the contours of the county reveals the fact that

the greater part of its area lies somewhat high for this valley-loving species. This is more especially the case in the north-east of the county, from the Weaver Hills northward, where most of the ground is over 1,000 feet above the sea. But even in the south the only really low-lying parts are the Trent valley, that of its tributary the Tame, and along the Derbyshire boundary in the Dove valley from below Burton to Ashburne, while along the Shropshire boundary the ground falls away again. Between the Trent valley and the Black Country rise the moorlands of Cannock Chase, a great part of which is from 600 to 700 feet high. An analysis of the records of this species from the county, shows that almost all of them are from the valleys referred to or their immediate neighbourhood.

Beginning from the Birmingham district in the south, although the bird certainly breeds on the Warwickshire side, the occasional notices in local papers of its occurrence to the north of the city seem to require substantiation. To the Trent valley it is, however, an occasional visitor. Dickenson, in 1798, wrote that it was sometimes, though very rarely, heard at Weston, but Garner described it as unknown in the Trent valley north of Lichfield. In 1892 the Rev. T. W. Daltry reported its occurrence at Moddershall, but with some reserve, as the locality seemed unsuitable. At Eccleshall, about five miles from the Trent, Dr. McAlldowie says, in 1895, that it was heard for a whole season "a few years ago," while at Sandon Mr. Wells Bladen records it as singing in 1883, and also states that it has been heard for two seasons past near Rugeley. Still lower down the valley it bred in Hamstall Ridgware in 1897 (*Zool.*, 1909, p. 75), and in the Burton district, according to Mr. E. Brown, it occurred in considerable numbers about 1853, when the song was to be heard in every grove in the neighbourhood. This is confirmed by Sir O. Mosley, who states that it is neither frequent nor numerous near Tutbury, but that in some years it occurs, occasionally in considerable numbers. When not disturbed, they have been known to return to the same locality for several seasons, and a definite instance of breeding at Rolleston in 1841 is recorded. Higher up the Dove valley it is of somewhat irregular and uncertain occurrence, but a cock sang at Claymills in 1904, and in the same year at Stramshall, near Uttoxeter, while it is said to have been heard also at Calwich, though most of the records from the upper Dove valley come from the Derbyshire side. On the Shropshire side it has been recorded within a mile of the border, but not as breeding on the Staffordshire side, and an isolated occurrence is reported by Mr. Daltry from Leycett in 1889, which seems to require substantiation.

CHESHIRE.—As Mr. T. A. Coward points out in his recently published *Fauna of Cheshire*, the northern limits of the Nightingale's range in the west of England are formed by the wooded lowlands of this county, while even in these districts it only occurs as an occasional visitor. Almost every year, he says, the local newspapers report occurrences of the Nightingale in various parts of the county, but the majority prove, on investigation, to be of some other species. He further points out that neither nestlings nor eggs have been actually found in the county, but that there is presumptive evidence that the birds nested in most of the cases where their occurrence is beyond doubt. An examination of these last, as enumerated by Mr. Coward, indicates that the Nightingale has never been proved to occur anywhere in the south-east of the county, and that the lowland wooded districts above referred to are practically the lower parts of the valleys of the Dee, Weaver, and Mersey, or one of the latter's tributary-streams, with the Wirral, which lies between the Dee and Mersey estuaries. It seems evident, therefore, that the hills of Derbyshire and Staffordshire, and their outlying portions in east Cheshire, form an effective barrier to the spread of this bird into the latter county from the east, and the evidence rather points to the Cheshire birds being stragglers across the north Shropshire plain, where the Nightingale is also an occasional visitor.

Among the Cheshire records are two from the north-east corner of the county : Strines, close to the Derbyshire border, and Romiley, on the Upper Mersey, in 1896. Assuming the correctness of both (and there is always a possibility of an error in identification, especially in a district where the Nightingale is practically unknown), it might seem possible that these birds had entered Cheshire from the West Riding, but a personal acquaintance on the part of one of the writers with this district enables us to say definitely that we do not believe this to be the case. On the whole, therefore, Cheshire would seem to fall very naturally into line with Denbighshire and Flintshire, in forming part of the western outlying portion of the Nightingale's range.

DERBYSHIRE.—The greater part of this county lies outside the regular breeding-range of this species, and with the exception of the southern lowlands, records of nesting have always been few and far between ; but from the end of the eighteenth century onwards we have a series of isolated instances of nesting, so that it is now possible to define the limits of the range with some accuracy.

By far the greater number of these records come from the

low lying Trent valley and the flat, well timbered district which extends roughly from Derby in the north to Melbourne and Burton in the south, and from Tutbury on the west side to Trent Junction on the east. In this part of the county it occurs not infrequently, but by no means annually even here. Glover mentions one as heard in Normanton Lane, near Derby, in 1828; Neville Wood, in 1836, wrote that a few pairs usually frequented the Foston and Allesley Woods, and J. J. Briggs, in 1849, stated that it visited the Melbourne district every spring. One bird was shot here in 1848, and a nest was taken and described in the *Zoologist* (1849, p. 2,484). In 1863 Sir O. Mosley and Mr. E. Brown described it as sometimes occurring in considerable numbers, and in other years as altogether absent in the Burton and Tutbury districts. About 1853 there was a great influx of this species, and the song was heard in almost every wood near Burton, but from that time up to 1863 it only occurred rarely. About 1881 and 1882 a pair or two nested near Wellington and Bretley. Several pairs appeared to have bred in the Derby district in 1901, and in this year they were probably general in the south of the county (W. H. Walton). In 1908 the song was again heard near Derby (W. H. Walton), and in 1909 at Chellaston (C. H. Wells). Probably in most seasons a pair or two would be found in the Trent valley if carefully looked for.

Above the junction of the rivers Dove and Trent it does not, as a rule, penetrate to any great distance. It has already been stated that it ranges to Foston and Tutbury, but occasionally it has been known to work its way up much higher. Thus Sir O. Mosley says it has been found as far north as Snelston, near Ashburne. On the borders of Snelston and Clifton, Jourdain heard a male in full song in the spring of 1895, and in 1901 another was reported only a mile or so away (*Victoria History of Derby*, I., p. 124). In 1910 one was heard near the entrance to Dovedale, at Thorpe, where it is also reported to have occurred for a day or two in former years. These localities, as well as two or three on the Staffordshire border, are all in the Dove valley. In the Derwent valley above Derby the only record deserving credence appears to be that of Messrs. Hall and Statham, who report the song as heard in Matlock Dale for a few days in 1907. It then ceased, but was heard a few days later down the valley at Duffield.* Apparently the males at these outposts failed to attract mates, for both here and at Thorpe the song ceased after a few days, and

* There is also some reason to believe that it has also been heard at Matlock, about 1872.

the birds disappeared. On the eastern border of the county the country is less hilly, but, though the Nightingale undoubtedly occurs in Nottinghamshire, definite records from Derbyshire are wanting, with the exception of Pilkington's statement in 1789, that it is sometimes seen on the north-east borders of the county, particularly in the parish of Creswell, and Whitlock's assertion that certain woods on the outlying portions of Sherwood Forest are occasionally patronised. Recorded occurrences at Winster in 1878 and Bakewell are almost certainly erroneous.

LEICESTERSHIRE.—The greater part of this county lies low, the only exception being part of Charnwood Forest, which is over 700 feet above the sea. The Wolds north of Melton Mowbray, and between it and Market Harborough, are decidedly lower, and rarely exceed 600 feet. There is thus no great natural obstacle to the general distribution of the species, but it appears to be somewhat uncertain and irregular in its appearance. Mr. H. S. Davenport says that he never knew of any particular haunt in Leicestershire being frequented for two years in succession. Miss N. Marsh, however, says that they nest annually in Grimston Gorse, and are said to have done so regularly for fifty years or more. This seems, however, to be an exceptional case, and speaking generally, the bird seems to be commonest in the valley of the Soar, along the Nottinghamshire border, where the ground falls away towards the Trent valley and towards the south-east of the county. On the western side records are practically absent. Possibly the fact that so many notes of its appearance come from the Leicester and Loughborough districts may be due to the presence of observers rather than birds, and it is apparently most numerous in the north-east, where it is reported as very common in the Belvoir Woods (Miss Marsh), while Mr. R. C. Seechem finds it plentiful near Croxton Keyrial, and adds that he knows of five places where they nest close to the village. Mr. M. Browne also quotes Mr. Ingram as recording it breeding at Barkstone, the Kennel Woods and Calcraft Bushes in the Belvoir district. In the Soar valley it is not uncommon locally, and Mr. G. Frisby estimates that as a rule there are from twelve to twenty nests within a three or four mile radius of Quorn. Babington recorded it from Leicester, Rothley, Wanlip, etc.; Harley from Loughborough, Whetstone Gorse, as well as Groby, Martinshaw, Braunstone, and Wistow. Mr. G. H. Storer reports it from Leicester, Braunstone, and Kirby Muxloe. In other parts of the county it seems to be decidedly scarce, though Mr. Davenport met with four pairs

nesting near Keythorpe, and one at Skeggington, in 1893, an exceptional year. A nest was taken at Tugby in 1888, and another reported in 1893 (Rev. H. Parry). The only definite record from the west of Charnwood Forest is that of one heard in 1906 at Swannington (Mr. G. Frisby). Finally, in the south-eastern border of the county, Mr. W. J. Horn states that in 1905 no fewer than twenty-five males were in song in the Market Harborough district.

NOTTINGHAMSHIRE.—As compared with the adjoining county of Derbyshire, the distribution of the Nightingale is remarkable in extending far more to the north. But here again, as usual, the lie of the land gives the clue to the problem, for while the only low-lying parts of Derbyshire are the wide vale of the Trent and the lower parts of the Dove and Derwent valleys, all in the extreme south of the county, the greater part of Nottinghamshire is traversed by the Trent, with low-lying meadows on either hand as it flows northward to the Humber, and the only rising ground is in the Mansfield district, while even here only one or two scattered portions exceed 600 feet in height. So that it is not surprising to find that there are few districts in which it has not occasionally bred, while it is quite common in the Trent valley between Nottingham and Newark, as well as on the Leicestershire border near Belvoir. In the Trent valley above Nottingham it is much scarcer, but has bred for three or four years past, at any rate, at Wollaton (Miss M. Russell), while Mr. C. E. Pearson heard it only twice in thirty years at Chilwell. Lower down it is much commoner, and is reported at three places between Nottingham and Lowdham (Mr. C. E. Pearson), at Arnold, Oxtun and, Southwell, the two latter regularly (Mr. J. Whitaker), at Bleasby (Miss N. Marsh), while Mr. Poynty Wright has found it plentiful in the Trent valley as far as Newark, and thinks that it shows a tendency to increase. He also considers it fairly well distributed in the south-east corner of the county, and it is common in the Vale of Belvoir, and breeds there (Whatton-in-the-Vale, etc.). In the Sherwood Forest district it is only an occasional visitor, and Mr. Whitaker only records it five times in thirty-four years at Rainworth, but states that it has nested at Ollerton. Still further north we come to the well-wooded and fertile "Dukeries." Here a few pairs have long been known to breed near Worksop, and the Rev. L. C. Barnes heard two in song in May, 1909, at Scofton, while Mr. Whitaker states that it has nested near Retford. From the north-east of the county our information is defective, but it is probable that a few pairs breed there also.

LINCOLNSHIRE.—Lincolnshire has yet no separate history of its fauna, and it has been somewhat difficult to obtain the requisite information on which to base an account of this bird's distribution. To the Rev. F. L. Blathwayt and Mr. R. B. Lodge we are mainly indebted for the information here given.

There seems to be no doubt that the Nightingale has increased considerably in numbers over most of the county during the last thirty years, and even slightly during the last ten, and it seems not unlikely that the latitude of Lincoln would nearly represent its northern limit fifty years ago. In the north-east of the county at any rate a definite extension has taken place in the last forty years. It is not included in a list of birds found at Swinehope, published in the *Naturalist* for 1852, and John Cordeaux, in his *Birds of the Humber District*, puts its arrival in this part of the county at about 1870.

At the present time the Nightingale seems to be scattered sparingly over the greater part of the county, where there are suitable haunts. It is really abundant in the larger woodlands, especially round Lincoln, and in the middle and south-west of the county generally. In the "fen" country of the south-east it is naturally uncommon, as it is also in the marsh country in the north-east between the Wolds and the sea. In the north-west its numbers appear to be smaller than in the centre of the county, but it occurs regularly in the large wooded tract about Brigg in the north. On the Wolds its visits would appear to be irregular, and its haunts more widely scattered, but further information about this district is desirable.

YORKSHIRE.—The distribution of the Nightingale in this important part of its range has been so lately dealt with, and in such an able manner, by Mr. T. H. Nelson in his *Birds of Yorkshire*, that it is hardly necessary to do more here than to give a condensed summary of what he there says. It is only necessary to add that since this book was published nothing has occurred, Mr. Nelson informs us, to lead him to suggest any modification of that account.

Like Mr. D'Urban in Devonshire, at the extreme south-west of the bird's range, Mr. Nelson expresses a decided opinion that here, on the northward fringe, the Nightingale has not extended its range within the time when this could be definitely traced. He points out that, contrary to what was once believed, further research has revealed the fact that over one hundred years ago the bird bred pretty regularly, probably as regularly, at the northern point of its range, as it does to-day. Mr. Nelson also points out that, although it has been known to

visit occasionally districts still further north, it is quite probable that these exceptional visits were also made in the past, and that these visits are dependent to some extent at any rate on the variations that take place from year to year in its numbers, and its relative abundance in some seasons in its normal area of distribution. Within the area of its regular summer-range it usually occurs in limited numbers only. It is only in the neighbourhood of Doncaster, and on the southern fringe of the county bordering Nottinghamshire, that it can be described as fairly abundant. A line passing north of Rotherham and Barnsley, and east of Wakefield, Leeds, and Harrogate to near Boroughbridge, and then east through Skelton (five miles north of York), and, sweeping round the southern spur of the Wolds up to Beverley, and finally reaching the North Sea about Hornsea, circumscribes the portion of the county within which the Nightingale is an annual summer visitor, while an outer line from Sheffield by Huddersfield, Bradford, Otley, Ripon, and Thirsk to Normanby-in-Cleveland, thence south-east to Scarborough, includes all the localities for which there is satisfactory evidence of the bird ever having bred or occurred.

The whole Yorkshire distribution lies strictly within the lowlands, and nowhere exceeds 250 feet above sea level, except in the single instance of its breeding within the Spa Gardens at Harrogate. Indeed, the foothills of the Pennine Range, of the Cleveland Hills, and even those of the chalk Wolds form fringing borders of the bird's range.

On the fringe of its range it is not at all constant to one particular haunt, and is more abundant generally in some seasons than in others, which may to some extent account for its intermittent appearance in the more northern and outlying districts within its range.

From the counties further north there are a few records, but, in our opinion, further evidence is required before they can be fully accepted. It is quite possible that an occasional male may reach Lancashire, as there is no natural obstacle to prevent its doing so. Howard Saunders only deemed one worthy of attention up to 1892, and Mr. H. O. Forbes states that no authentic nest has ever been taken, though he seems to think that there is evidence of its occurrence in the Irwell valley. The B.O.C. Migration Report for 1907 contains the record "Lancashire, May 19." On investigation this appears to be founded on a report of two at Clitheroe on that date. As recorded by Saunders, Mr. G. Bolam saw and heard a male in the north of Northumberland in 1893.

NOTES

RARE BIRDS IN STAFFORDSHIRE.

A FEW weeks ago, while staying at Stretton Hall, near Stafford, I had the pleasure of examining a number of birds, all of which were shot in that neighbourhood by Mr. Monckton. Amongst them are two adult male (shot January 14th, 1908) and one immature female (shot December, 1905) Smews (*Mergus albellus*), and a hybrid cock Pheasant and Greyhen, showing dominant influence of the male bird. Other birds there include three Green Sandpipers (*Totanus ochropus*), a Goosander (*Mergus merganser*), a White-fronted Goose (*Anser albifrons*), shot at Stretton on January 30th, 1906, a Manx Shearwater (*Puffinus anglorum*), and two adult Goldeneyes (*Clangula glaucion*), one of which was shot in December, 1905.

Mr. Giffard, of Chillington, also kindly showed me his birds procured there, and amongst them I found a Scops Owl (*Scops giu*) (a new species for our Staffordshire list), an Arctic Skua (*Stercorarius crepidatus*), two Little Auks (*Mergulus alle*), a Turnstone (*Strepsilas interpres*), Gadwall (*Anas strepera*), Long-tailed Duck (*Harelda glacialis*), two Pintails (*Dafila acuta*), an Osprey (*Pandion haliaëtus*), a rufous or erythristic Partridge, and a melanistic Lapwing (*Vanellus vulgaris*). Unfortunately, no further data than those I have given are available for any of these specimens.

On April 8th, 1911, on Bellfields Reservoir, where the wild-fowl are carefully protected by Mr. Giffard, I identified, with Mr. F. A. Monckton, the following species:—Great Crested Grebe, several pairs; Mallard, Coot, Wigeon, Teal, Pochard, Shoveler, several pairs; Tufted Duck, about fifty; Goldeneye, several pairs, and a White Wagtail (*Motacilla alba*).^{*} Bellfields Reservoir, Gailey Pools, Norton Pool, and one or two other large sheets of water in that part of Staffordshire are frequented by many of the rarer ducks and waders in severe winters and on the spring and autumn migrations, and have added many species to our list of Staffordshire birds. A few pairs of Crossbills still remain at Stretton, and three flew over the house on April 9th last.

JOHN R. B. MASEFIELD.

^{*} Mr. F. A. Monckton has since written to tell me that he saw two White Wagtails at Bellfields Reservoir on April 21st last.

RAPID NEST-BUILDING BY MISTLE-THRUSH
AND BLACKBIRD.

NEAR Carlisle a Mistle-Thrush (*Turdus viscivorus*) built its nest in two days and laid the first egg on the third day.

D. A. SCOTT.

AT West Byfleet, Surrey, a gardener put an ordinary wooden rake against a wall, under a lean-to roof, on the evening of Thursday, April 13th, 1911. On the following day (Good Friday) he did not work. On the Saturday he found a nest of a Blackbird (*Turdus merula*) on the teeth of the rake, and resting against the wall. On Sunday the nest contained one egg, and now the bird is sitting upon four eggs.

T. R. WARD.

[It may be remarked that such cases as the above are probably due to a previous nest being destroyed (or becoming deserted for some reason), when the bird is just on the point of commencing to lay its eggs.—EDS.]

WHITE-SPOTTED BLUETHROAT AND RED-NECKED
PHALAROPE IN SUSSEX.

ON May 15th, 1911, a gentleman staying at Winchelsea secured two rarities, the first being a specimen of the White-spotted Bluethroat (*Cyanecula wolfei*), which was flying about the sloe bushes on the marshes at Pett. This is, I believe, only the second record for the county. The bird was a male in fine condition, the white spot being very conspicuous.

The second was an example of the Red-necked Phalarope (*Phalaropus hyperboreus*), which was swimming about in the Brede Canal, which runs between Winchelsea and Rye. The specimen was a hen, and, no doubt, on her way north to the breeding haunts. We very rarely see them in Sussex on migration. I think only four have been previously obtained in spring. Both birds were seen by me in the flesh on May 16th.

H. W. FORD-LINDSAY.

EXTRAORDINARY ABUNDANCE OF NIGHTINGALES
IN SHROPSHIRE.

THE present season is quite remarkable for the number of Nightingales (*Daulias luscinia*) which have appeared in Shropshire. The normal range of the species in this county is confined to the Severn Valley south of Shrewsbury, though from time to time a few odd birds take up quarters in localities north of that area. This year, however, the usual haunts of the Nightingale appear to hold more than double their normal complement of individuals, whilst a number of Nightingales have taken up residence in places

to the west and north-west, where the species has seldom or never been previously recorded. It will be interesting if observers in places along the western and northern boundaries of the Nightingale's ordinary territory will keep a look out to see if this year it exceeds the limit in other districts, as it has done in Shropshire.

H. E. FORREST.

GREY WAGTAIL BREEDING IN SURREY.

ON May 14th, 1911, while walking along the banks of the River Wey near Elstead, I was surprised to see a Grey Wagtail (*Motacilla melanope*) chasing a Pied Wagtail (*M. lugubris*), and as the former flew down stream towards a water-wheel house it was joined by its mate, which had something in its beak. Thinking they were nesting, I waited some time in the hope of seeing them again. I then made my way towards where I saw them fly. After watching one of them for a few minutes, I commenced a diligent search, and succeeded in finding the nest, on which I could distinctly see the bird with my glasses. As I approached the nest the bird came off, and was very demonstrative. I had some difficulty in reaching the nest, which was situated in the thatch of the water-wheel house, overhanging the water. It contained young birds just hatched out.

Referring to records in *The Birds of Surrey* (J. A. Bucknill), p. 137, I find there are only two *well* authenticated records of the species having bred in the county. I cannot agree with the author that the eggs are quite unmistakable; indeed, in some cases, it would be quite impossible to separate them from the eggs of the Yellow Wagtail (*M. raii*), though if a series of the two species be placed side by side, it will be easily seen that there is a general tendency towards a paler colouring and a large size in the eggs of the Grey Wagtail. P. F. BUNYARD.

THE TWO-BARRED CROSSBILL IN SCOTLAND.

IN looking over some back numbers of *BRITISH BIRDS*, my attention was drawn to the note by Mr. William Evans in Vol. III., p. 306, and although it can hardly pass as a good "record," perhaps the following note from one of my old journals may be of interest to some of your readers, and may possibly lead to the tracing of the further history of the specimen by someone resident in the north:—

When in Inverness on August 15th, 1882, I saw in the shop of Mr. Henderson, taxidermist and gun-maker, a very good specimen of *Loxia bifasciata*, along with eight or ten Common Crossbills, all of which, I was informed, had been

lately received from, and set up for, some local gentleman, a statement which their condition seemed quite to bear out. The Two-barred Crossbill was in full red plumage, and very bright, but I did not, unfortunately, make any further note of it, but my recollection is that I was told that the birds came from the Rothiemurchus district. GEORGE BOLAM.

GREEN WOODPECKER IN WESTMORLAND.

As the Green Woodpecker (*Gecinus viridis*) is a rare bird in Westmorland, it may be of interest to record that I saw and heard one on several occasions during April, 1911, in a wood near Kirkby Lonsdale. My keeper tells me that he has heard the bird at this time of year for the last three years, but I cannot find any old nesting-holes, nor does the bird seem to have a mate. HULME WILSON.

PROBABLE SNOW-GEESE IN ESSEX.

I HAVE received a communication from Major J. Thornhill, Leigh-on-Sea, Essex, to the effect that while he was searching the marshes in the neighbourhood of that place on April 13th, 1911, he observed two pairs of birds which he identified, with all the certainty possible under the circumstances, as Snow-Geese (*Chen hyperboreus*, Pall). The birds were very wild, but it could be seen that "they were quite white, except the flight-feathers, which were black." At first he wondered if they could be Gannets, but "was quickly undeceived by their manner of flight." He saw the birds for a second time on the 18th of the same month, but they were not seen again. While recognizing that records of rare birds, unaccompanied by specimens, must always be received with caution and reserve, I venture to hold that the exceptional clearness and unmistakableness of the identification characters of this species, give this record a much greater value than is usual in such cases. Many of the records of Snow-Geese accepted by Saunders (*Ill. Man. B. B.*, 2nd ed., 1899, pp. 405-406) refer to birds "recognized on the wing."

A. LANDSBOROUGH THOMSON.

COMMON SCOTER IN WEST YORKSHIRE.

ON May 7th, 1911, I saw a Common Scoter (*Edemia nigra*) on Hemsworth Dam, in the West Riding of Yorkshire, about fifty miles from the sea-coast at its nearest point. The bird was apparently a male, and was in company with four Tufted Ducks (*Fuligula cristata*). Although the Common Scoter is reported as common on the coast of the county and in the

Humber, the only other occurrence of the species in the district with which I am acquainted is an example reported in *The Naturalist* (Vol. VII., 1857, p. 197) to have been procured at the same place—Hemsworth Dam—in the autumn of 1856.

WALTER B. ARUNDEL.

[In his *Birds of Yorkshire* (p. 478), Mr. T. H. Nelson says the Common Scoter “has been met with on most of the large tarns, lakes, and reservoirs, and on many of the rivers, particularly in the West Riding.”—Eds.]

GREY PHALAROPE IN WARWICKSHIRE.

ON September 11th, 1910, an adult male Grey Phalarope (*Phalaropus fulicarius*) was shot on a small muddy pool at Morton Bagot, near Henley-in-Arden, Warwickshire, and sent to Messrs. Spicer and Son, Birmingham, for preservation. I examined it immediately after it had been set up. In the *Victorian History of Warwickshire* this species is spoken of as “an uncertain winter visitor, but in some seasons not rare; it appeared in several localities in 1844, 1853, 1857, and 1886.” Beyond this I have only been able to find one record (*Zool.*, 1892, p. 26), though, doubtless, specimens have occasionally been allowed to pass unrecorded.

A. GEOFFREY LEIGH.

VORACITY OF THE LARGER GULLS.

ANYONE who has spent much time among the east coast fishermen and gunners, is probably well acquainted with different stories as to the well-known voracity of the Herring- and Black-backed Gulls, and of the extraordinary accidents that occasionally result therefrom.

It may be doubted, however, if the instance that I brought to the notice of the British Ornithologists' Club in April, 1911, has often been eclipsed. Pashley, the well-known naturalist of Cley, sent me a Great Black-backed Gull (*Larus marinus*) which had been shot in January by one of the local gunners. The bird was found to have swallowed a stake of wood twelve inches long, and this had pierced the gullet and worked through the skin of the neck. The skin had healed up perfectly around the wood, but inside the gullet was also found the skull of a Lesser Black-backed Gull, into which the stake had been thrust. It appears probable that this unattractive morsel had been fastened by the stake as a bait to some trap. It is not very unusual to find a Gull with a fish-hook worked through the mandible. I saw a young Herring-Gull shot last November in this predicament, the bird presenting a curious appearance on the wing, owing to the presence of some eighty yards of

fishing-line attached to a cod-hook, which had passed through the horny sheath.

The point most worthy of notice in the majority of these instances is the amazing vitality that allows these birds, not only to live, but to thrive under such conditions. In both the instances I have cited the birds were flying strongly, and appeared to suffer but little inconvenience.

CLIFFORD BORRER.

HERRING-GULL AND SHAG OCCUPYING DISUSED RAVENS' NESTS.

ON May 11th, 1910, on the Cornish coast, I found a Herring-Gull (*Larus argentatus*) sitting on the top of a nest which had been built and used by a pair of Ravens (*Corvus corax*) earlier in the year—their young having disappeared from the nest between the 10th and 16th of April, when still hardly capable of flight. The Gull had put in a slight lining of dry grass, and laid one egg.

Of the further history of events last year I have no knowledge. This year the Ravens—presumably the same pair—built their nest on the same cliff, but lower down on or near a ledge occupied last year by a pair of Shags (*Phalacrocorax graculus*). A good view of the nest can be had from an adjacent, accessible part of the cliff. The nest was completed by February 26th, but no eggs could be seen on that date. Six days later it contained four eggs, but on my next visit (March 20th) I found it empty—robbed. On March 26th a Shag was sitting in the nest, but there were as yet no eggs; on April 5th a Shag was again in the nest, and after dislodging her—a by no means easy matter—I saw that she had laid three eggs. On April 16th I found her there again, but failed to induce her to move.

So far as I could see, the Shags had adopted the nest as left by the Ravens, without addition or alteration.

W. I. BEAUMONT.

GREAT NORTHERN DIVER SWALLOWING A CUTTLE-FISH.

A GREAT Northern Diver (*Colymbus glacialis*) shot in Orkney in January, 1911, had in its gullet a Cuttle-fish, which when placed in a basin in its natural position, measured eight inches across. It was body-downwards in the gullet with the tentacles pointing upwards, and the gastric juices had already commenced their work upon the body where it was lowest in the gullet, although very slightly and only in one place. Two of the tentacles appeared to be missing.

H. W. ROBINSON.

BLACK-THROATED DIVERS IN SUSSEX & SURREY.

A SPECIMEN of a Black-throated Diver (*Colymbus arcticus*) was picked up at Winchelsea, Sussex, on March 21st, 1911, by a pupil of the University School, Hastings. The bird, a female, was changing from winter to summer-plumage.

Mr. Bristow of St. Leonards has the bird for preservation, and afforded me an opportunity of examining it.

H. W. FORD-LINDSAY.

ON November 6th, 1909, a Black-throated Diver (*Colymbus arcticus*) was found in an exhausted condition by the roadside near Caterham Valley, and died shortly after capture. The bird, which is now in my possession, was preserved by Mr. Chas. Thorpe, of Croydon, who informs me that it is a young male, probably in the second year.

HOWARD BENTHAM.

SIBERIAN CHIFFCHAFF IN SHETLAND.—A specimen of *Phylloscopus r. tristis* was obtained in Shetland on October 28th, 1910, and is reported by Mr. J. S. Tulloch (*Ann. Scot. Nat. Hist.*, 1911, p. 115).

NORTHERN WILLOW-WREN IN SCOTLAND.—A bird identified by Dr. C. B. Ticehurst as a Northern Willow-Wren (*Phylloscopus t. evermanni*) is recorded by Miss Rintoul and Miss Baxter (*Ann. Scot. Nat. Hist.*, 1911, p. 116) as having been sent to them from the Isle of May Lighthouse in May, 1909.

NUTHATCH IN IRELAND.—In the *Irish Naturalist* (1911, p. 95), Mr. W. J. Williams reports that on March 26th, 1911, when standing in a garden at Malahide (co. Dublin), he heard a strange note and, having stalked up to within a few paces of the bird, he had no difficulty in identifying it with certainty as a Nuthatch (*Sitta cæsia*). There is no previous authentic case of the occurrence of the Nuthatch in Ireland, and as the species is of such a "sedentary" nature, the presence of a vagrant in Ireland is very remarkable.

SISKINS IN MULL.—Mr. D. Macdonald reports (*Ann. Scot. Nat. Hist.*, 1911, p. 114) that he saw on November 2nd, 1910, some twenty Siskins (*Chrysomitris spinus*) in Mull, where the bird is rare.

HOBBY IN ELGIN.—The occurrence of a Hobby (*Falco subbuteo*) in the "Moray" area is a rarity; one is recorded by Mr. J. Davidson (*Ann. Scot. Nat. Hist.*, 1911, p. 117) as having been shot at the end of June, 1910, at Innes, Elgin. The bird was stuffed when the writer saw it, but by the measurement of the wing (10 inches) it appeared to be a

male. The keeper by whom it was shot, said that it had a bare spot on its breast, but there is no real evidence of its having nested in the locality.

WIGEON BREEDING IN ROXBURGHSHIRE.—Mr. C. G. Blackwood records (*Ann. Scot. Nat. Hist.*, 1911, p. 117) the finding of a nest with eight eggs of *Mareca penelope* on May 7th, 1910, in some long heather near a small loch in the "higher moorlands" of Roxburghshire. Besides putting the duck off the nest, he saw three or four drake Wigeon on the loch on the same day. Mr. W. Evans has proved the breeding of Wigeon in south-east Scotland in 1910 (*cf.* Vol. IV., p. 256), and Mr. Abel Chapman has suspected them of breeding near Yetholm (*cf.* Vol. II., p. 55).

ALBINO WOOD-PIGEONS.—Mr. R. H. W. Leach writes to us as follows:—"When in a bird-stuffer's shop (Macpherson's Sports Emporium) at Inverness, I saw a perfect albino Wood-Pigeon (*Columba palumbus*), shot on Lord Cawdor's estate by one of the keepers. It was stated to be a male, and in good condition. It was stuffed. As albino Wood-Pigeons seem so scarce, I thought this worth recording."

Two are mentioned by Mr. J. H. Gurney to have been shot in Norfolk in 1910 (*Zool.*, 1911, p. 171), and a search of the county avifaunas would probably yield a fair number of records.

COMMON GULL BREEDING ON THE FARNE ISLANDS.—Mr. H. B. Booth records in the *Naturalist* (1911, p. 179) that on July 11th, 1910, he noticed a Common Gull (*Larus canus*) flying round over the "Inner Wideopens," and came to the conclusion that the bird had young ones, but he was unable to make certain. He pointed out the bird to the watcher, and was later informed by Mr. H. A. Paynter that he and both of the watchers had subsequently often seen the two old Common Gulls with three young ones.

Mr. R. Fortune writes (*loc. cit.*) in the same connexion that he identified a pair of Common Gulls breeding on the "Outer Wideopens" about twenty-five years ago, and mentioned the occurrence to the late John Hancock, who, he believes, took one or more of the eggs. Howard Saunders did not know of a breeding-place of the Common Gull south of the border.

WE much regret to have to announce that Mr. Robert Service, the well-known naturalist of the Solway, died at his home in Dumfries, on May 8th last. In our next number we hope to publish a memoir of Mr. Service, by an ornithologist who was intimately acquainted with his work.



LETTERS



ALBINISTIC ROOKS FOUND TO CONTAIN PARASITES.

To the Editors of BRITISH BIRDS.

SIRS,—As albinistic varieties of birds are so seldom examined as to their condition, it may be worth while to record that some years ago, when shooting young Rooks in Denbighshire, I found that all, or very nearly all, of those shot had the feathers round the base of the beaks white. These birds (thirty-one in number) proved so full of tapeworms, that the keeper buried them all. I was inclined to infer that the white facial feathers were co-related with the weakening caused by the parasites.

The rookery is the largest I ever remember to have met with.

ALFRED H. COCKS.

THE MOVEMENTS OF YOUNG ROOKS.

To the Editors of BRITISH BIRDS.

SIRS,—Mr. Eric B. Dunlop records (Vol. iv., p. 370) the disappearance of immature Rooks from the Windermere district during October, and the reappearance of a small percentage of them about the beginning of April. That is exactly what has taken place in the Blantyre district. During September last, after the autumn moult had taken place, lots of feathered-faced birds were to be seen, but before the end of October they were all gone, and only some half a dozen—the first on March 29th—have returned. They are not breeding, but are to be seen in the fields all day consorting with flocks of Jackdaws.

Regarding Her Grace the Duchess of Bedford's belief, that only in very exceptional cases do Rooks retain their bill-feathers after the first autumn moult, I had always believed that only in exceptional cases did they lose them before the second autumn moult, and I have always found semi-captives to retain the bill-feathers until the latter date. A bird which I have had since May 10th, 1910, has its nostrils completely covered yet.

WALTER STEWART.



REVIEWS

Photography for Bird-Lovers. By Bentley Beetham, F.Z.S.
Square 8vo., 126 pp., 16 plates. (Witherby & Co.)
5s. net.

ALTHOUGH single chapters are to be found in several illustrated bird-books, we have hitherto been without a complete guide to the sport and art of bird- and nest-photography. Mr. Beetham's book is therefore all the more welcome, and its having been written by the accomplished author of the recently published *Home-life of the Spoonbill*, guarantees that the methods which it describes must be entirely on the right lines for the successful accomplishment of this difficult but fascinating pursuit.

It is safe to say that besides the ordinary difficulties of photography, there are few branches of sport or art that are more full of disappointments, or call for a greater exercise of patience and ingenuity, than bird-photography. Hitherto each worker has had to gain his experience and perfect his methods, almost entirely through the many failures and rare successes of his own exertions; now, however, given a working knowledge of ordinary photographic methods, the beginner in bird-work will only have to follow carefully Mr. Beetham's directions and suggestions, and he will know that he is working on the right lines. There will still be plenty of opportunity for the exercise of ingenuity in overcoming the multitude of difficulties that each species and the varying situations present, but these are best left for each individual to overcome for himself, as they are such that only experience can teach, and it would clearly be impossible to tabulate them in text-book form. Although we were a little disappointed at first to find nothing startlingly new in Mr. Beetham's book, it is very gratifying to find how closely the working methods evolved by so clever an exponent of the art, agree with one's own.

Beginning with two chapters on the general scope of the work and the apparatus required, the author takes the beginner by easy stages through the still-life portraiture of nests, etc., and the photography of young birds, to the more difficult and fascinating portraiture of their parents by the different methods of stalking and concealment. Next comes a chapter on rope-work on cliffs, which, although intensely interesting, will necessarily only prove of use to a few; a short chapter

then follows on colour and cinematograph-photography, while the last chapter deals with photographing birds in captivity. With regard to this subject, we most heartily endorse what the author says : if well taken for a specific purpose and honestly used, these photographs are often of great use and value, but nothing can be more dishonest or unscientific than to attempt to pass off such studies as those of genuine wild birds.

It will be seen from the above outline that the general plan of the book covers the whole range of bird-photography, and while experienced workers will find much to interest them, even if they find no new "tips," the beginner will do well to study every page.

The plates are carefully chosen to illustrate various points in the text, and are uniformly good and well reproduced.

N. F. T.



From a Group by S. REID.]

(B.B., Vol. v., Pl. 1.

Robert Service

Born May 23rd, 1854. Died May 8th, 1911.

BRITISH BIRDS

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ROBERT SERVICE.

B. 23RD MAY, 1854. D. 8TH MAY, 1911.

[PLATE I.]

By the death of Robert Service, Scotland loses one of her most zealous and able field-naturalists.

It will ever be a matter of regret that he was not given health and length of life to accomplish his dearest wish—the writing of a book on the fauna of the Solway area. It is certain that no one could have been better fitted for this task, either by local observations or general knowledge, as is abundantly proved by his contributions to scientific literature. I have compiled a list of upwards of two hundred papers and notes from his pen, which appeared from time to time in the *Scottish Naturalist*, the *Entomologist*, the *Zoologist*, the *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society*, and in other similar publications. These papers are not confined to one or two branches of science, for he was a lover and an admirer, just as much as a student, of Nature in all her ways. The exigencies of business, however, gave him too little time for the arduous task of writing for the Press, and it is to be regretted that with him must have perished many results of mature thought and hardly-gained experience.

Scientists, such as Alfred Newton, H. A. Macpherson, Howard Saunders, Major Barrett-Hamilton, Professor G. F. Scott-Elliot, Messrs. W. Eagle Clarke, and J. A. Harvie-Brown, were among his constant correspondents; but the fact that he was universally recognised as *the* authority on local zoology, never made him speak or write in a high handed or arbitrary manner. He was ever ready to impart information to all inquirers, and his criticism of others was never caustic.

Personally, I owe him a debt of gratitude for his sincere assistance to me when writing my *Birds of Dumfriesshire*. In the Preface, when thanking my numerous corre-

spondents, I have stated: "With so many willing assistants it becomes almost invidious to mention any by name; it is, however, quite certain that pre-eminent among them stands Mr. Robert Service." I had here added the words, "without whose assistance this book could never have been written;" and it was only at his express desire, and much against my will, that these ten words were struck out.

He possessed an extensive collection of birds, many of them local rarities; and among his eggs was one of a Golden Eagle taken locally. His collection of books might have been described as a good working library, and with other desirable editions he used especially to show a *Histoire Naturelle en Miniature de de* [sic] 48 *Oiseaux* (96 pp., Paris, 1816), the smallest book on ornithology with which Professor Newton was acquainted, and which measures but 2.6 by 2.15 inches.

His generosity was remarkable, and he was willing at any time to give a bird from his collection if, by so doing, he thought he could in any way assist the recipient in some particular branch of study. The National Collection in the Royal Scottish Museum, Edinburgh, includes many of his valuable donations, and none is more prized than the specimen of the Whiskered Tern (*Hydrochelidon hybrida*), the first of its species to be shot in Scotland. It was obtained some six miles NN.W. of Dumfries on 2nd May, 1894.

He was always willing to deliver one of his scientific addresses in aid of charity, and perhaps one of his kindest acts was his lecture on birds given annually at Christmas to the prisoners in the local jail. When, in recent years, a junior Field-Naturalists' Club, known as the Solway Ramblers, was organized locally, he often acted as conductor on their excursions. Devoted to science, he was only too pleased to do all he could to teach others to share his enjoyment of Nature.

He has been described as "a man of intense nature, a formidable opponent, and a fast friend," and if I had to

give his chief characteristic in a word, I should say it was humility in its noblest and highest sense.

Robert Service was born on 23rd May, 1854, at Netherplace, near Mauchline, Ayrshire, where his father, James Service, was gardener to Lord Justice Clerk Hope. After being employed in a similar capacity by Mr. J. Hodgson, of Houghton House, near Carlisle, his father, in 1858, established at Greenbrae, in the suburbs of Dumfries, the nursery business which was soon after transferred to Maxwelltown.

Robert was educated at the old Free Kirk School in David Street, Maxwelltown, and on completing his education there, entered his father's business. When giving evidence in 1892 before the Committee appointed to inquire into a plague of voles in Scotland, he was asked by the chairman, Sir Herbert Maxwell: "You have studied natural history for some time?" His reply was, "Yes, ever since I was a child;" and there is no doubt that in the Corberry Hill Nurseries, which his father rented, Robert Service found as a boy, as he did later as a man, a happy hunting-ground for what was to him something much more real than a mere hobby.

The engrossing nature of his trade allowed him but little leisure in which to follow his inclination, and the extensive and varied output of original research-work that he achieved is therefore remarkable. Walks in the country after the work of the day was done, and excursions as far afield as possible on holidays, were the only opportunities he had for pursuing his favourite study. Long nights were often spent at the Maxwelltown Observatory in the study of the stars; in fact every spare moment was devoted to science.

It was only natural that he should early have become a member of the Dumfriesshire and Galloway Natural History and Antiquarian Society. It had fallen into abeyance in 1876, when Robert Service, then aged twenty-two, with others started to re-organize it. Their efforts were successful, and with him as secretary the society

was re-founded with a membership of forty. When he resigned office in 1882, the society was firmly established with a membership of one hundred and thirty-seven.

In 1879 he married Jemima Margaret, daughter of Mrs. Glendinning, of Glasgow Street, Maxwelltown.

In 1882 he was sorely tempted to leave his business in pursuit of his natural bent, by the invitation of Joseph Thomson, the African explorer, to accompany him as naturalist on an expedition to Eastern Africa for the Royal Geographical Society. I have often talked over with him this episode in his life, and it does credit to the man to have sacrificed to his sense of duty what must have been the height of his ambition.

The extensive immigration of Pallas's Sand-Grouse to the British Isles, in 1888, naturally appealed to him, and he was in almost daily communication on the subject with the Rev. H. A. Macpherson. The sandy shore, at Southerness in Kirkcudbrightshire and on the opposite coast of Cumberland, afforded attractive ground to this species, so that these two ornithologists were fortunately placed for making observations. When, in August, 1889, a nestling was found in the Culbin Sands, Moray, it was sent by Professor Newton to Robert Service for examination. He found forty-five seeds, "Three of which were those of rye grass (*Lolium perenne*), one of tufted hair grass (*Aira cæspitosa*), and one of broom (*Cytisus scoparius*)."* He also identified some seedling plants, raised in pots from seeds, which William Hastings, the Dumfries taxidermist, had taken from a Sand-Grouse he had skinned in 1888. The majority were wild mustard and fescue grass, while the rest were *Vicia cracca*, *Ranunculus sp.*, and a few clover.

He was one of the principal witnesses summoned before the departmental committee appointed in 1892 by the Board of Agriculture to inquire into a plague of field-voles in Scotland, when he strongly deprecated the destruction of the natural enemies of these agricultural

* *Ibis*, 1890, p. 213.

pests. Three years later his knowledge of fish, and of the local fisheries, was recognized by his being called on to give evidence before the Solway Fisheries Commission.

In 1901 he came near to making an astronomical discovery, a new star, which was first observed by Dr. Anderson of Edinburgh, early on February 23rd, being seen the same evening by Robert Service.

On the death of his father, in October, 1901, the conduct of the business devolved on himself and his brother. Enjoying a high reputation as a nurseryman and seedsman, the office work was strenuous, and he found even less time for following his scientific pursuits. He was persuaded, however, to take over the honorary duties of secretary and curator of the Dumfries and Maxwelltown Observatory Museum in 1903, and for seven years he held these posts to the entire satisfaction of the directors. He was repeatedly in request as judge at local shows, as well as at those of the Royal Caledonian Horticultural Society, and as he also took a keen interest in politics and local affairs, he found his time more than fully occupied. A few years later his brother dissolved partnership, and his time had almost wholly to be applied to his business.

There is no doubt that overwork brought on the illness which eventually proved fatal to him. He was stricken by partial paralysis some twelve months ago, and a more severe shock occurred in November, depriving him of speech. It was a sad sight to his many friends to see such a splendid specimen of manhood, and one of previously so active and so hearty a temperament, thus afflicted. The generous response to a testimonial then raised, as an expression of the esteem in which he was held, and as some slight appreciation of his many services, testified to the affection in which he was so widely held. He died at his residence, Janefield, Maxwelltown, Dumfries, on May 8th, 1911, and three days later was laid to his rest in Troqueer Kirkyard, being survived by his wife, two sons, and three daughters.

Such, then, is a brief outline of the more noticeable events in his life. This is hardly the place to refer to his keen and active Conservatism in politics (he was at one time offered the editorship of the local party-newspaper), to his public services on town and parish councils, to his connexion in his earlier days with the Dumfries volunteers, or to the interest he took in the Dumfriesshire and Galloway Horticultural Society. The district which knew him best will miss him most, and can alone appreciate to the full the loss it has sustained by his death. Personally, I realize a blank that can never be filled; but I shall always remember above all other lessons I learned from him, one which he taught me not long before his first illness. We were discussing the relentless way in which death seems to cut off lives before they complete their purpose, and how little any of us can leave behind us when we die. "Yes," he replied, smiling, "but we always leave our example." Robert Service has left us his example of generosity, of a stern sense of duty, of an untiring energy, of patient and loving study of the beauties and mysteries of Nature.

Among other societies he was, at the time of his death, a member of:—

The Andersonian Society of Glasgow (elected 1901, resigned 1910).

The British Association for the Advancement of Science (elected 1901).

The British Ornithologists' Union (elected 1900, resigned 1910).

The Dumfriesshire and Galloway Natural History and Antiquarian Society (original member 1876, secretary 1876-82, vice-president 1901-6, honorary vice-president 1907-10, honorary life-member 1910).

The Edinburgh Field Naturalists' and Microscopical Society (elected 1904).

The Natural History Society of Glasgow (elected 1885.)

The Royal Caledonian Horticultural Society (elected 1904).

The Yorkshire Naturalists' Club (elected 1906).

Besides being a constant contributor to the Transactions of many of the above-mentioned societies, Robert Service's papers often appeared in the *Scottish Naturalist*, the *Annals of Scottish Natural History*, and the *Zoologist*. Under the different titles of "Zoologicus," "Mabie Moss," and "Amateur Astronomer," he frequently wrote articles in the *Kirkcudbrightshire Advertiser*, the *Dumfries and Galloway Courier and Herald*, the *Dumfries and Galloway Standard*, and other newspapers. To give a complete list of his papers is here impracticable; but among those dealing with ornithology the following are perhaps some of the most valuable:—

1880. Breeding of the Shoveller in the Stewartry of Kirkcudbright.—*Zoologist*, 1880, p. 406.
1881. Montagu's Harrier in Kirkcudbrightshire.—*Op. cit.*, 1881, p. 385.
1885. Disappearance of the Chough (*Pyrrhocorax graculus*, L.) from the Stewartry of Kirkcudbright (read April 28th, 1885).—*Transactions of the Natural History Society of Glasgow*, n.s., Vol. I., 1883-6, pp. 117-122.
1887. On the Former Existence of Ptarmigan in South-west Scotland.—*Zoologist*, 1887, pp. 81-89.
1887. On the Nesting of the Tufted Duck in Kirkcudbrightshire.—*Op. cit.*, 1887, pp. 342-344.
1891. Sand-Grouse in Kirkcudbrightshire.—*Scottish Naturalist*, Vol. XI., 1891, p. 192.
1894. Occurrence of the Whiskered Tern in Solway.—*Annals of Scottish Natural History*, 1894, pp. 179-181.
1895. The Starling in Solway.—*Op. cit.*, 1895, pp. 92-96.
1896. Long-tailed Duck in the Solway Firth.—*Op. cit.*, 1896, p. 123.
1897. The Fulmar on the Solway.—*Op. cit.*, 1897, p. 194.
1897. The Pied Flycatcher in Dumfriesshire.—*Op. cit.*, 1897, p. 249.
1898. The Jay in Dumfriesshire and Kirkcudbright.—*Op. cit.*, 1898, pp. 49 and 181.
1899. Great Spotted Woodpecker in Kirkcudbright.—*Op. cit.*, 1899, p. 110.
1901. The Vertebrates of Solway: A Century's Changes. (Printed for private circulation.) 12mo., 23 pp. A reprint (with Introduction added) of his paper read on November 16th, 1900, and published in the *Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society*, 1906, n.s., Vol. XVII., pp. 15-31.
1902. The Black-headed Gull (*Larus ridibundus*): Some Modifications of Habits.—*Zoologist*, 1902, pp. 216-219.
1902. The Vertebrate Zoology of Kirkcudbrightshire—in Maxwell's Guide Book to the Stewartry of Kirkcudbright, 7th edition, 1902, pp. 193-215.
1903. Bird Migration in Solway.—*Annals of Scottish Natural History*, 1903, pp. 193-204.

1904. From a Solway Notebook.—*Op. cit.*, 1904, pp. 65-71.
1905. Some Changes in the Avifauna of the Solway Area.—*Transactions of the Edinburgh Field Naturalists' and Microscopical Society*, 1904-5. Vol. V., pp. 181-186.
1905. The Sylviidae of Solway (read February 23rd, 1904).—*Transactions of the Natural History Society of Glasgow*, 1905, n.s., Vol. VII., pp. 137-147.
1906. The Waders of Solway (read November 28th, 1905).—*Op. cit.*, 1905-6, n.s., Vol. VIII., pp. 46-60.
1906. The Sparrow-Hawk (read February 16th, 1903).—*Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society*, 1906, n.s., Vol. XVII., pp. 273-278.
1906. The Diurnal and Nocturnal Raptorial Birds of the Solway Area (read December 18th, 1903).—*Op. cit.*, 1906, pp. 327-339.
1906. The Rarer Birds of the Solway Area (read April 20th, 1905).—*Op. cit.*, 1906, pp. 423-435.
1908. The Bar-tailed Godwit as a Solway Bird.—*Annals of Scottish Natural History*, 1908, pp. 85-87.
1908. The Eider Duck in Solway Waters.—*Op. cit.*, 1908, p. 119.
1908. Red-necked Phalarope in the Solway Area.—*Op. cit.*, p. 120.
1908. Bird Migration in the District (read April 18th, 1907).—*Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society*, 1908, n.s., Vol. XIX., pp. 169-171.
1908. The Hawfinch in Galloway.—*Annals of Scottish Natural History*, 1908, p. 253.
1910. The British Skuas, with Special Reference to their Local Occurrences (read November 6th, 1908).—*Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society*, 1910, n.s., Vol. XXI., pp. 16-19.
1910. Rare Birds of Recent Occurrence (read February 19th, 1909).—*Op. cit.*, 1910, pp. 134-136.
1911. Notes on the British Starling (read 28th January, 1910).—*Op. cit.*, 1911, n.s., Vol. XXII., pp. 100-103.

HUGH S. GLADSTONE.

ON A PECULIAR TYPE OF FEATHER IN THE
WATER-RAIL.

BY

J. LEWIS BONHOTE, M.A.

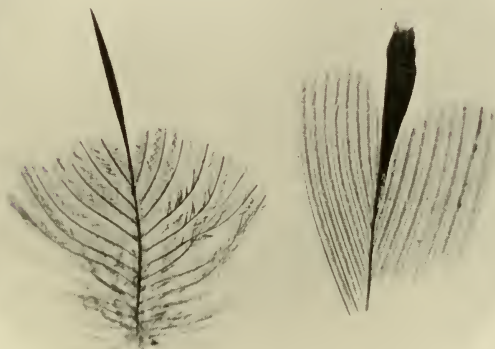
A FEW weeks ago, when skinning a freshly-killed Water-Rail (*Rallus aquaticus*) my attention was drawn to a number of shining brown bristles, which appeared scattered over the head, and more especially in two lines running from the base of the bill on either side to the top of the eye—in that region, in fact, which is marked out in many species as the anterior portion of the superciliary stripe. On removing some of these feathers and examining them under a microscope, it was at once evident that these apparent bristles were the terminal portion of the rhachis of each feather. This is very clearly shown in the accompanying microphotograph from which it will be seen that the barbs have undergone considerable wear, and it is due to this fact that these bristles became so apparent as to attract my attention. Under a high power we may see that this “bristle” is structurally a true barb, similar to the tips of the rhachis in ordinary feathers, and at its proximal end the remnants of a few broken barbules may still be seen.

No notes appear hitherto to have been made on this very peculiar structure, and I can find no mention of it in any books or in descriptions of this or allied species of Rails. It, however, reminded me of the “wax tips” of the Waxwing, and on comparing a specimen I found the structure of the “wax tip” identical with that of the “bristle,” though in the former case, from its larger size and more brilliant coloration, it is of course, much more conspicuous, and has given the bird its trivial name.

Similar structures may, and probably do, exist among other families, but I do not know of any. Professor Newton, however, in describing the Waxwing,* states that the “wax tip” distinguishes it from *almost* all other birds, but whether he had some other species in his mind

* *Dictionary of Birds*, p. 1026 (1896).

when he wrote the article, or whether it was merely an instance of his exceedingly careful and cautious work, I cannot say. In the *Bulletin of the B.O.C.* (XXVII., p. 82, 1911), where attention was first drawn to this character, I mentioned that I had not been able to find it on any other species of Rail, but a further careful search shows that it is to be found on most, if not all, our native Rails, and Mr. Seth-Smith tells me that it is to be seen



ON THE LEFT, A FEATHER FROM THE HEAD OF A WATER-RAIL ;
ON THE RIGHT, AN INNER SECONDARY FROM A WAXWING TO
SHOW SIMILARITY IN STRUCTURE.

(From a Microphotograph by Staff-Sergeant A. Gibbons, R.A.M.C.)

on the Clapper Rail of America and the Weka Rail of Australia, so it is probably common to all the Rallidæ. It is, however, entirely absent on both the Coot and the Moor-hen.

In the Water-Rail it is common to all ages and both

sexes, though in some individuals the bristles are more numerous, and consequently more easily seen, than in others.

It is quite useless to attempt to speculate on the causes by which these feathers have been modified, or of what use, if any, they are in the bird's economy. Were they confined to one sex and conspicuously coloured, some zoologists would at once put down their origin to sexual selection, but as these conditions do not apply, they must have arisen through some other cause. It has been tentatively suggested that by their hardness they help to protect the bird's head when pushing through the reeds, though in no individual do they appear numerous enough to have much practical effect, and even if without them the feathers did get more worn and rubbed, it is difficult to see how such a result could be sufficiently powerful to lead to their development and perfection. In fact, so far as we can see, there seems no obvious reason which has led to their evolution, and it is worth bearing this fact in mind at a time like the present, when specialized structures are often plausibly accounted for as having been developed under the stress and through the workings of Natural Selection alone.

NOTES

ON THE PERSISTENCE OF THE RIGHT OVARY AND ITS DUCT IN BIRDS.

WITH reference to the notes on this subject (*cf. antea* Vol. IV., pp. 188 and 216), I think it may be worth while to put on record, that on March 19th, 1911, I received a female Lesser Kestrel (*Falco cenchris*) which had been shot the day before near Empoli (Tuscany, Italy), and on dissecting it I discovered that it had both ovaries equally well developed, but the right oviduct was not so wide as the left. This bird is in the rare

stage of plumage, due to age, I think, of an old female that has (in part) acquired the plumage of the adult male. The feathers of the crown have a blue-grey central stripe becoming paler towards their margins, which are light rufous; sides of the head, of the neck, and of the upper-breast bluish-ash; rump, upper tail-coverts and tail of a bright blue-grey, this latter slightly barred and with a broad subterminal



Ovaries of *Falco cenchris*,
specimen *a*, 18th March,
1911. (Exactly natural
size.)

black band, and broadly tipped with white; a few narrow lines and small spots on the mantle; upper-breast narrowly streaked, the lower-breast and flanks with a few blackish spots. I am not aware of any recorded instance of the present species assuming a plumage resembling that of the adult male, as appears to be the case, not very infrequently, in very old females of *F. tinnunculus*.

In about twenty years' experience, some thousands of specimens of many species have come into my hands. I have always paid special attention to the sexual glands of the females, and have accumulated notes on this subject. The case of *F. cenchris* seems to me of a peculiar interest, because it is the first time that I have found both ovaries present in this species.

I venture to add a list of the birds which have passed through my hands with the right as well as the left ovaries present, because I can record some species that have not been mentioned in the above-mentioned notes. All the following specimens have been obtained in Italy, except when otherwise stated:—

HEN-HARRIER (*Circus cyaneus*). Out of four female specimens :—

Immature, December 12th, 1892. Both ovaries nearly equal in size and development ; right duct present, though not so wide as the left one.

PALLID HARRIER (*C. macrurus*). Out of four female specimens :—

a. Immature, March 27th, 1890. Both ovaries well developed and containing numerous ova of various sizes ; right oviduct present, opening into the cloaca, but not so wide as the left one.

b. March 30th. Probably not fully adult, though it appears a third year's bird. Both ovaries well developed.

MARSH-HARRIER (*C. æruginosus*). Out of six female specimens :—

a. A second year's bird, December 4th, 1891. Both ovaries well developed ; remains of the right oviduct appeared to be present, in the shape of a band.

b. Immature, but probably older than *a.* November 7th, 1903. Both ovaries equal in size and development.

c. Adult, August 21st, 1908. Both ovaries well developed.

d. January 22nd, 1910. A specimen of the blackish variety ; apparently in a stage intermediate between the immature and fully-adult bird. Both ovaries nearly equal in size and development, and the right duct present, but certainly not functional, being reduced to a band along the kidney as far as the cloaca.

SPARROW-HAWK (*Accipiter nisus*). Out of seven female specimens :—

a. Adult, February 3rd, 1896. Both ovaries nearly equal in size and development, with remains of the distal portion of the right oviduct in the shape of a duct joined to the cloaca and about 10 mm. long.

b. A second year's bird. February 3rd, 1907. A very beautiful specimen, with light margins to the feathers of the upper wing-coverts. Both ovaries well developed

c. Young, October 18th, 1910. Probably a bird in its first winter-plumage ; above it is very dark brown with rusty margins to the feathers, and below dull white, streaked, and to some extent irregularly barred, with dark brown. (This specimen was obtained in Sardinia, and belongs to the small and dark Sardinian

form, *A. n. wolterstorffi* Kleinsch.) Both ovaries equally well developed; the right oviduct was also present, and in much the same condition as the left one.

COMMON BUZZARD (*Buteo vulgaris*). Out of six female specimens :—

- a. Adult, December 9th, 1893, remains of the right ovary were present along the first lobe of the kidney, but reduced to half the size of the left one, which was well developed.
- b. Adult, February 3rd, 1905. An interesting specimen that agrees with the description by Bogdanow of *B. menetriesi*. Both ovaries nearly equal in size and development; the right oviduct also present in the shape of a band.
- c. Immature, November 30th, 1910 (Sardinia). The right as well as the left ovaries present. This specimen belongs to the small Sardinian form that is of an ashy earth-brown colour, tinged with reddish, and that I named *B. b. arrigonii* (*Avicula*, VII., 1903).

SERPENT-EAGLE (*Circus gallicus*). Out of three female specimens :—

- a. Adult, March 29th, 1890. The right ovary was present, but appeared atrophied, being about half the size of the left one, and containing very few ova, while in the left ovary they were numerous and well developed.

MERLIN (*Falco aesalon*). Out of four female specimens :—

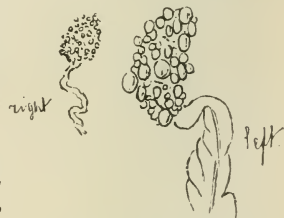
- a. Immature, December 12th, 1897. Showed remains of the right ovary along the first lobe of the kidney.
- b. Adult, December 27th, 1909. Both ovaries nearly equal in size and development.

RED-FOOTED FALCON (*Falco vespertinus*). Out of eight female specimens :—

- a. Adult, April 30th, 1894. Both ovaries well developed; the right duct present, but reduced to a ligamentous strand.
- b.* Adult, but probably it had not attained its fully mature plumage, having a rufous hue on its mantle, and below being paler and more spotted than fully adult females. Both ovaries and their ducts nearly equal in size, and with ova well developed.
- c.* A second year's bird. Throat and sides of the neck white, washed with yellowish; breast, flanks, and upper abdomen of a pale yellowish-red streaked with dusky; rest of the under-parts like the throat, and unstreaked.

It shows the left ovary and its duct functional and developing ova, and it retains remains of the right ovary, which is reduced to one half the size of the left one.

- d.** A second year's bird. Differs from *c.* in being a little more striped below, and with the streaks becoming drop-shaped towards the tip of the feathers. Ovaries as in *c.*, but it shows also remains of the right oviduct, in the shape of a band from the ovary to the cloaca (see figure).



Ovaries of *Falco vespertinus*,
specimen *d*, May, 5th, 1908.
(Exactly natural size.)

- e.** This appears younger than *d.*, and was probably a "last year's" bird. Crown of a dark greyish-brown with an admixture of rusty-red and black shaft-streaks; mantle brownish-grey, with the feathers edged with rusty-red or greyish-white; some feathers recently moulted are ashy-grey, barred with darker grey; four outside tail-feathers with large reddish-white spots, and the four central ones (recently moulted) blackish, barred with ashy-grey; below it is of a cream-colour, washed with light reddish on the breast, and much paler on the rest; breast, abdomen, and flanks with blackish stripes and spots larger than in *d.* Ovaries as in *d.*, but the right oviduct is almost as wide as the left one.

KESTREL (*F. tinnunculus*). Out of six female specimens:—

- a.* Immature, March 3rd, 1890. Both ovaries well developed and nearly equal in size.
- b.* Adult, October 6th, 1899. Shows remains of the right ovary, which is reduced to about two-thirds of the size of the left one.

SHORT-EARED OWL (*Asio accipitrinus*). Out of five female specimens:—

- a.* Adult, May 27th, 1892. The right ovary is present, but atrophied, being about half the size of the left one.

ROOK (*Corvus frugilegus*). Out of six female specimens:—

- a.* Adult, December 10th, 1893. Both ovaries present, but the right one less developed, and containing very small ova.

* *b. c. d.* and *e.* were obtained on May 5th, 1908, from a flock of several other specimens of both sexes; two more adult females were secured, but they showed only single left ovaries.

On September 20th, 1892, I received a female Hobby (*F. subbuteo*), which very probably showed an atrophied right ovary, but it was not easy to be sure, because the bird had been dead several days.

Lastly, I may record having found in two Mallard (*Anas boscas*) something like a duct joined to the right side of the cloaca, and about 10 or 12 mm. long; I think that this might have been the remains of a right oviduct. In both these birds only the left ovary was present.

While not wishing to draw any conclusion from so small a series as to the proportion of double-ovaryed birds in the above species, I have thought it useful, as material for further investigation, to state the number of female specimens of each species in my collection. Previous observations would seem to show that a double ovary was most often found in the Sparrow-Hawk, but from the small series in my collection it would appear to be more frequent in the Red-footed Falcon; but before any conclusion can be drawn, many more observations must be recorded.

CECILIA PICCHI.

RARE BIRDS IN SUSSEX.

MARSH-SANDPIPER.

IN BRITISH BIRDS, Vol. III., p. 386, Mr. M. J. Nicoll recorded two Marsh-Sandpipers (*Totanus stagnatilis*) killed near Rye, Sussex, on June 16th and 18th, 1909. I wish to place on record that a third specimen was shot on Bodiam Marsh on July 1st, 1910. It is a female, rather darker on the back than the one killed on June 16th, 1909. It was examined in the flesh by Mr. Ruskin Butterfield. All three specimens are in my possession.

IVORY-GULLS.

On February 7th, 1910, an immature female Ivory-Gull (*Pagophila eburnea*) was shot at Ecclesbourne, Hastings, and examined in the flesh by Mr. Ruskin Butterfield, and on February 11th, 1910, a male, also immature, was killed at the same place. This bird was examined in the flesh by Mr. L. Curtis Edwards. More than half the specimens obtained in Great Britain have been adult. The female killed on February 7th is especially noticeable, being spotted more or less all over with greyish-black spots, while the male has comparatively few.

ROSE-COLOURED STARLING.

A young male Rose-coloured Starling (*Pastor roseus*) was caught in clap-nets by a Starling-catcher at Rottingdean, near Brighton, on November 18th, 1910. This is an interesting

bird as being in the immature plumage. Most British specimens are in adult plumage. A casual observer would take it for a young Starling. It is beginning to change its plumage.

MEADOW-BUNTINGS.

Two male Meadow-Buntings (*Emberiza cia*) were shot at Ninfeld on April 1st, 1910, and were examined in the flesh by Mr. Ruskin Butterfield and the late G. Knight respectively. I believe these are the fourth and fifth British specimens.

LONG-TAILED DUCK.

A Long-tailed Duck (*Harelda glacialis*) was shot at Rye on March 31st, 1911, in transition plumage from autumn to spring. Was not that very late for it to be on the south coast ?

CREAM-COLOURED COURSERS.

A couple of Cream-coloured Coursers (*Cursorius gallicus*), a male and female, were shot in Pevensy Marshes, near Wartling, on May 5th, 1911, and were examined in the flesh by Mr. Ruskin Butterfield.

J. B. NICHOLS.

BLACK-THROATED THRUSH IN KENT.

THE fifth British specimen of the Black-throated Thrush (*Turdus atrigularis*) and the second for Kent, was shot at Wittersham on March 15th, 1911. It was forwarded to Mr. Bristow, of St. Leonard's, for preservation, and he kindly brought it to my house in the flesh. I carefully examined it and found that it was quite fresh, and without doubt a recently killed bird. On dissection it proved to be a male. I afterwards had the pleasure of exhibiting it at the May meeting of the British Ornithologists' Club (*vide Bull B.O.C.*, XXVII., p. 94).

The Black-throated Thrush is one of those eastern species that may be expected to turn up from time to time in these islands at migration time, since it has wandered more than once to Heligoland and Denmark, and has occurred with some frequency in Central Europe, while further east it naturally occurs more often still.

Ten days prior to the shooting of the present specimen, a more than usually heavy migration of Mistle-Thrushes, etc., was recorded at Dungeness Lighthouse, which is only some ten or fifteen miles to the south of Wittersham ; although no evidence exists to connect the two, it at least suggests that this bird may have arrived with our returning Mistle-Thrushes. The previously recorded examples of this bird were given in full at p. 379 of Vol. II. of this Magazine. N. F. TICEHURST.

NIGHTINGALE NESTING IN HEREFORDSHIRE.

A PAIR of Nightingales (*Daulias lusciniæ*) have just (June 13th, 1911) got their young off safely in Herefordshire—in the valley of the Teme---about midway between Knighton and Ludlow, on the Downton Castle Estate. I think this is the only pair near here. This is in the very north of Herefordshire.

W. S. MEDLICOTT.

LITTLE OWLS IN LINCOLNSHIRE.

THE Little Owl (*Athene noctua*) must be greatly on the increase in this county, at any rate in the district between Peterborough and Grantham, for during the first week of May this year (1911) I found four nests with four eggs in each; in each case the nest was in an ash tree, one nest being in an old hole of the Green Woodpecker. In addition to finding these four nests, I saw two or three Little Owls out in the open, one of them about mid-day and the others about 5 p.m. Probably there were several other nests in the immediate neighbourhood for each one that I met with, which tends to show that the Little Owl is not only fairly common, but plentiful in the above-mentioned district.

C. E. STRACEY CLITHEROW.

RED GROUSE IN BERKSHIRE.

A SPECIMEN of the Red Grouse (*Lagopus scoticus*) was brought to me for identification on March 2nd, 1911. It was obtained alive by an agricultural labourer within 200 yards of an iron-foundry in the small town of Wantage, in excellent condition, but apparently much exhausted. I am well acquainted with all the big shoots in the neighbourhood, and for ornithological purposes am in constant communication with the game-keepers: as far as I can ascertain, no Red Grouse have been turned down anywhere within twenty miles. The wind at the time of the procuring of the specimen had been blowing persistently from the south-west for several days. I must leave your readers to form their own opinion as to the starting point of the bird before it reached its destination here. I am certain (after careful inquiries) that it could not have possibly come from anywhere in the immediate neighbourhood.

W. M. WOODHOUSE.

[We believe that the Grouse Disease Commission have lately sold off the stock of Red Grouse kept at the Experimental Farm in Surrey, and it seems quite possible that one of these birds has escaped from captivity, or has been turned down. It is very unlikely that a truly wild bird would have strayed so far from its nearest breeding-haunts as Wantage.—EDS.]

CRANES IN SHROPSHIRE.

ABOUT 7.30 p.m. on May 6th, 1911, two Cranes (*Grus communis*) appeared over a farm at Longden Common, about six miles south-west of Shrewsbury. They were flying low down, and passed close over the heads of a man named Carswell and his two sons, alighting in the next field, where they commenced to feed on the grass. The men, who had never seen or heard of such birds before, and curious to ascertain what they were, crept up to the hedge and watched them for about an hour walking to and fro and grazing, at a distance of less than fifty yards. About 8.30 a neighbour named Corfield joined the watchers, and one of the sons then went into the field where the birds were, to try to get a closer view. They took alarm and flew to the next field, where they spent the night. Soon after 9 o'clock next morning, Corfield went to look after the sheep in this field, and found the birds grazing with the animals. On catching sight of him they took wing, and after flying round in circles till they attained such a height that they looked no bigger than pigeons, they flew right away in an easterly direction. The incident was first reported to me by a local clergyman, who thought that the birds were Great Bustards, but upon investigation I concluded that they were Cranes. The general behaviour of the birds—especially their soaring aloft before departure—supports this view, whilst the full description of the plumage and shape, which I obtained from Carswell and Corfield, confirms it beyond a doubt. They specially emphasize the fact that the birds had a red patch on the head, and that the feathers above the tail had a “crumpled” appearance. The legs and neck were very long, and the feet not webbed. On being shown pictures of the Bustard and Crane, Corfield was positive that the birds were not the former but the latter. This is the first recorded occurrence of the Crane in Shropshire, though in my *Fauna of Shropshire* mention is made of an example obtained in 1868 at Trippleton-on-Teme—just over the border in Herefordshire. The farmer who shot it, ascertaining from a natural-history book that it was only a “Common” Crane, gave the bird to his waggoner, who cooked and ate it!

H. E. FORREST.

[With regard to the above note the Duchess of Bedford kindly writes to us, under date June 23rd, 1911, as follows: “I think it more than likely that the Cranes came from Woburn, as both Common and White-necked Cranes (bred at Woburn last year and in 1909) have left us during the last few months. The description might apply to either, and the behaviour of

the birds is exactly that of our birds, which have been bred in the open park. The fact that there were two together also rather points to their being our birds, and if they are shot I think they will probably be found to be White-necked Cranes."—EDS.]

RINGED PLOVER BREEDING INLAND IN NORTHUMBERLAND.

MR. ABEL CHAPMAN, in his *Bird-Life of the Borders* (2nd ed., p. 33) says: "The Ringed Plover (*Ægialitis hiaticola*) is strictly marine in its haunts, and there is no local evidence of its breeding inland. Yet we have observed it frequenting the wide haughs of the Upper Coquet (twenty-five miles from the sea) at the end of March." Mr. Howard Saunders, in his *Manual of British Birds* (2nd ed., p. 539) says: "Throughout the British Isles the Ringed Plover is generally distributed along the flat portions of the coast, as well as on sandy warrens and inland lakes at some distance from the sea, and on migration it is also found by the banks of rivers."

It may be of interest to record that I found two nests on the Upper Coquet, more than thirty miles, as the crow flies, from the sea, on April 25th and 26th, 1911. In 1909, at about the same date, the birds were in the same district, but appeared not to have laid, while in 1910 there were no traces of them.

GEORGE T. ATCHISON.

[With reference to the above note, Mr. G. Bolam kindly sends us the following extract from his promised book on the *Birds of Northumberland and the Eastern Borders*: "The Ringed Plover breeds numerously on the shores of Northumberland, as also in East Lothian, and follows the course of many of our larger rivers far inland. Thus it nests on gravel beds on the Tweed, at the Lees, above Coldstream (where it was noticed so long ago as 4th May, 1842—*Hist. Berwickshire Nat. Club*, Vol. II., p. 4—and where I myself found it nesting in 1879 and have seen it frequently at short intervals since), and at Carham and Kelso (noticed there in 1868—*op. cit.*, Vol. VII., p. 305—and many times since), on the Teviot (*op. cit.*, Vol. VIII., p. 260, and frequently since); and on several of the tributary streams, as the Leader and Allan Water (*op. cit.*, Vol. VII., p. 305, etc), while I have seen it also in summer on the Lyne above Peebles, and on Gala Water. In Northumberland it breeds in several places on the Coquet above Rothbury, where I first found it, in the neighbourhood of Thropton, in 1887, and have since seen it at Holy Stone, and as high up as Alwinton; at Bromlee Lough, where I

came upon a pair with young on June 27th, 1897; and at Sweethope, where at least two pairs nested in the like year; on the Breamish I first noticed a single pair breeding near Beanley in 1886; but it had begun to outnumber the Common Sandpiper there by 1902, threatening indeed to supplant it, and now exceeds it in numbers on all the haughs as far up as Ingram, and is even penetrating still further into the heart of the Cheviots. Several of these stations are more than five and twenty miles from the sea as the crow flies, and they are particularly referred to here, as it has sometimes been stated in print that this species was confined to the coast, on the Borders, in the breeding season, although Selby had long ago observed the contrary." For some previous records of inland nesting, compare Vol. II., p. 150; Vol. III., p. 415.—EDS.]

BLACK TERN IN BEDFORDSHIRE.

ON June 9th, 1911, I saw a Black Tern (*Hydrochelidon nigra*) on the lake at Battlesden near Woburn.

LAWRENCE FLEET.

WHITE-WINGED BLACK TERNS IN SUSSEX.

A SMALL flock of seven White-winged Black Terns (*Hydrochelidon leucoptera*) arrived between Winchelsea and Rye on May 29th, 1911. Three were shot, two males and one female, and these I examined in the flesh on May 31st. It is a curious fact that on precisely the same date (May 29th, 1904) a small flock appeared at the Hoppen Pits in Kent, of which five specimens were obtained. There have been two previous records for Sussex.

H. W. FORD-LINDSAY.

BLACK-THROATED DIVER IN CARNARVONSHIRE.

IN Vol. IV., p. 26, of this Magazine, I recorded the first occurrence of the Black-throated Diver (*Colymbus arcticus*) in Carnarvonshire, but I little thought at the time when the observation was made, that the second occurrence would so closely follow. My friend Mr. Owen Griffiths, in whom I have confidence, informs me that on April 30th, 1911—curiously the same month and date on which I saw my example in 1910—he saw an individual of this species on the water at the foot of a cliff on the northern side of the Great Orme's Head, and his description and sketch, taken at the time when the observation was made, showing the distribution of black, grey, and white feathers on its body, neck, and head, free my mind from

the possibility of any doubt arising as to the accuracy of his identification. He was favoured with a good opportunity for watching the bird, and not only was it close in shore, but "it spent most of its time preening and rising to shake itself." With his glasses he could see clearly the half-collar of white streaks, as well as the very dark, almost black feathers on its chin and throat. We had previously been together watching the passage of Red-throated Divers (*C. septentrionalis*), with which species he is quite familiar. It is possible that Black-throated Divers pass along the Welsh coast in April much more often than is commonly assumed. R. W. JONES.

SLAUGHTER OF MANX SHEARWATERS BY BLACK-BACKED GULLS.

ON the island of Annet in the Scilly Islands, large numbers of sea-birds breed, consisting chiefly of Greater and Lesser Black-backed Gulls, Puffins, Manx Shearwaters, Herring-Gulls, Razorbills, and a few Oyster-catchers and some Shags. Large numbers of Manx Shearwaters (*Puffinus anglorum*) are slain by the two species of Black-backed Gulls, their skins, in many cases turned inside out, being found in scores on the ground frequented by these two species. Puffins are also treated in a similar manner, but many fewer of these birds are killed. All the remains I saw were dried up, but Mr. C. J. King, of St. Mary's, informs me that he has often found them freshly killed, and that they are done to death by the Gulls tearing a hole in the abdomen to devour the entrails—literally, I take it, drawing the unfortunate birds when living. The Razorbills are evidently too formidable for even the Greater Black-backed Gull to tackle, as they are left very much alone, and I do not wonder at it, judging by the adults which I handled, the thickest leather gauntlets being no protection whatsoever against their formidable beaks. The Puffins do not seem to have any fear of the Lesser Black-backed Gull, judging by the way they sit cheek by jowl on the same rock, so perhaps it is only the larger species which disembowels them. Owing to my visiting the island by day, I only saw one living Manx Shearwater, this being one which I picked up in a landing-net at sea, about two miles from the island in question, but the number nesting there is estimated locally at between a hundred and a hundred-and-fifty thousand.

H. W. ROBINSON.

[In a most interesting article on the Puffin by Mr. F. Heatherley, which appeared in *Country Life*, September 3rd,

1910, it is stated that colonies of the Lesser Black-backed Gull are always strewn with corpses of Puffins, which have been merely disembowelled and left. On the other hand the colonies of the Greater Black-backed Gulls contain no corpses, possibly because they have been swallowed by the larger birds! Mr. Heatherley has never actually seen this take place, but he quotes the evidence of Mr. J. W. Parsons, who states that before being swallowed the Puffin is shaken and ducked under water until drowned. The capacity of the larger Gulls for swallowing is certainly remarkable, and only a week or two ago I saw a Mediterranean Herring-Gull pick up a good-sized vole from the water in which it was swimming, and gulp it down alive.—F. C. R. JOURDAIN.

The "skinning" of the Manx Shearwaters, described by Mr. Robinson, is much more likely to have been the work of rats than Gulls, although the rats may have finished the carcasses and left the skins after the Gulls had partially eaten them.—EDS.]

FULMARS NESTING IN CAITHNESS.

ON May 30th, 1911, Mr. B. B. Riviere and I took a boat for the purpose of inspecting the cliffs which form Berriedale Head in Caithness. On some of the steeper faces we found that a small colony of Fulmar Petrels (*Fulmarus glacialis*) had established itself, and as this is probably the most southerly nesting-place of this species in the British Isles, it should be worthy of record. So far as we could see there were from thirty to forty birds altogether, but there may have been more, as it is difficult to distinguish this bird (except in flight) when perched high up among innumerable gulls. Dr. Kennedy, of Dunbeath—the local authority on the birds of his district—was with us, and informed us that he had never seen or heard of this bird breeding there before. There is no doubt that the Fulmar Petrel is increasing its range, as in comparatively recent years it has established new colonies on the west and north coasts of Scotland.

A. H. MEIKLEJOHN.

☞ [The Fulmar has been recorded as breeding as far south as Barra (*cf.* Vol. II., p. 374), but Mr. Meiklejohn's interesting record is considerably more southerly than any previously known breeding-haunt on the *mainland*.—EDS.]

RECOVERY OF MARKED BIRDS.

IN addition to those already acknowledged, I have received subscriptions towards the expenses of the "marking scheme"

from Mr. R. F. M. Wood, Mr. W. I. Beaumont (second subscription), Mr. Walter Stewart, Mr. C. I. Evans, Mr. M. Winzar Compton, Mr. A. Mayall (third subscription), Mr. R. O. Blyth (second subscription), Mr. G. R. Humphreys, Mr. N. F. Richardson, Mr. W. T. Blackwood, and Mr. J. D. Patterson (second subscription).—H.F.W.

BLACKBIRD (*Turdus merula*).—B.B., No. 11,257, marked by Mr. N. H. Joy at Bradfield, Berkshire, on July 4th, 1910, as a nestling. Recovered at the same place on March 17th, 1911.

WOOD-WREN (*Phylloscopus sibilatrix*).—"Country Life," No. 571, marked by Mr. J. D. Patterson at Goathland, Yorkshire, in 1910, hen-bird caught while sitting on nest with six young ones. Found nesting within eighty yards of last year's site, on June 13th, 1911. Re-marked with a "British Birds" ring.

GREAT TIT (*Parus major*).—B.B., No. 5512, marked by Mr. H. Noble at Henley-on-Thames on May 12th, 1910, as an adult. Found sitting on nest in May, 1911, within a hundred yards of the nest where found last year.

NUTHATCH (*Sitta cæsia*).—B.B., No. 5517, marked by Mr. H. Noble at Henley-on-Thames on April 30th, 1910, as an adult. Recovered at the same place about March 29th, 1911.

B.B., No. 5516, marked by Mr. H. Noble at Henley-on-Thames on April 27th, 1910, as an adult. Found sitting on eggs in May, 1911, within a hundred yards of the nest where found last year.

GREENFINCH (*Ligurinus chloris*).—B.B., No. B57, marked by Mr. J. R. B. Masefield at Cheadle, Staffordshire, on June 20th, 1910, as a nestling. Recovered at Bong, par Le Catelet, Aisne, France, on April 2nd, 1911. Reported by M. Jules Vasseur.

STARLINGS (*Sturnus vulgaris*).—B.B., No. 11,824, marked by Mr. N. H. Joy at Bradfield, Berkshire, on January 24th, 1911. Recovered at Pangbourne, Berkshire, on April 18th, 1911. Reported by Mr. J. Howard.

B.B., No. C106, marked by Mr. N. H. Joy at Bradfield, Berkshire, on February 1st, 1911. Recovered at Englefield, Reading, Berkshire, on May 18th, 1911. Reported by Mr. G. H. Claydon.

MALLARD (*Anas boscas*).—B.B., No. 9143, marked by Mr. T. Hepburn at Old Hall Marshes, Tollesbury, Essex, on May 26th, 1910. The bird was hatched-out under a

domestic fowl from an egg collected on the marshes. Recovered at West Mersea, Essex, in September, 1910.

BLACK-HEADED GULL (*Larus ridibundus*).—B.B., No. 30,095, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Recovered at Askam-in-Furness, Lancashire, on April 4th, 1911. Reported by Mr. Arthur Beavers.

CUCKOO IN GOLDCREST'S NEST.—In the *Field* for June 3rd, 1911, Mr. H. S. Davenport gives an interesting account of a young Cuckoo which was being reared by a pair of Goldcrests in his garden at Dunmow, Essex. The Goldcrest is one of the rarer foster-parents of the Cuckoo, and all the previous records by reliable observers appear to relate to the Continent. Professor Newton (*A History of British Birds*, 4th ed., Vol. II., p. 394), states that the Cuckoo has been known to lay in the nests of all the Sylviidæ mentioned in that work, except the Rufous, Savi's, and the Yellow-browed Warbler, and according to his classification, the Goldcrest is included among the Sylviidæ. Dresser, Bidwell, Rey, and Wells Bladen also mention it in their lists, and Herr A. Walter is said by J. A. Link to have taken three eggs twice in one week from Goldcrests' nests. Rey quotes Baldamus as his authority, but had no specimens from Goldcrests' nests in his collection; while Dresser inserts it on the authority of Thienemann. Mr. Davenport is inclined to believe that the egg is carried in the crop rather than the bill before it is regurgitated, and finally deposited in the nest of the foster-parent.—F.C.R.J.

SCOTTISH HERONRIES.—Mr. A. L. Thomson gives an account of the Heronries in the Dee area in the *Annals of Scottish Natural History*, 1911 (pp. 7-9), and Mr. H. B. Watt adds (pp. 72-75) further particulars of Scottish Heronries to his previous lists, and suggests the making of a census of Herons in Scotland.

COCK PHEASANTS ASSUMING FEMALE-LIKE PLUMAGE.—Although female Pheasants assuming male-like plumage are frequently met with, cases of the reverse are very rare. In the *Field* (25, 2, 1911, p. 384), Mr. H. Hammond Smith contributes an interesting article on three cases of males with partially hen-like plumage, these birds being sent to him by Mr. A. Gilbey in December, 1910, from Uxbridge (Middlesex). In these birds the proximal part of the tail is hen-like, while the distal half is cock-like, the head and neck are mostly hen-like, and other parts of the plumage are mixed. All the specimens had well-developed spurs. The article includes a technical

description by Mr. S. G. Shattock of the sexual glands of these birds, from which it would appear that they were perfectly normal.

At the February meeting of the British Ornithologists' Club, Mr J. G. Millais exhibited (*cf. Bull. B.O.C.*, XXVII., p. 54) an adult male Pheasant which was also partly in a plumage like that of a female. The bird was shot at Alnwick Castle, Northumberland, on November 23rd, 1910, and its organs appeared to be normal, but were not examined microscopically.

The only examples previously recorded of a cock Pheasant assuming female-like plumage known to Mr. Hammond Smith are : A live bird kept under observation in 1903 by Mr. S. G. Shattock and Dr. C. G. Segliman, in which the tail-feathers, during their growth, exhibited the female character in their proximal portions, but these characters were lost, and the bird became perfectly normal after subsequent moults ; a case recorded by Mr. J. G. Millais, and another by the Hon. Walter Rothschild.

BLACKCOCK ASSUMING FEMALE-LIKE PLUMAGE.—At the February meeting of the British Ornithologists' Club, Mr. J. G. Millais exhibited an example of a Blackcock shot by Mr. F. Stobart at Glen Troot, Wigtownshire, on September 20th, 1910, which was partially in a female-like plumage. The sexual organs of this bird were said to be normal, but they were not examined microscopically. Like the Pheasants mentioned above, this bird was considered to be assuming the plumage of the female, but I do not think that there is proof of this in any of these cases. They can all be more reasonably explained, I think, by supposing that these birds were wanting in pigment, and this is what I suggested in exhibiting an abnormally coloured Blackcock at the April meeting of the British Ornithologists' Club. This bird was shot on the 10th of November, 1910, at Clonrae, Dumfriesshire, by Mr. H. S. Gladstone, who very kindly sent it to me. In skinning it I was able to make sure, by the condition of the skull and also by finding two unshed feathers of the juvenile plumage, that the specimen was a bird of the year. I preserved the testes, which appeared outwardly normal, and they have since very kindly been examined microscopically by Captain A. E. Hamerton, R.A.M.C., who informs me that they are, in his opinion, perfectly normal. The plumage of the bird is, however, quite abnormal, especially on the head, neck, mantle, upper-breast, and flanks, the feathers of which are barred and vermiculated with yellowish-brown. In most of the

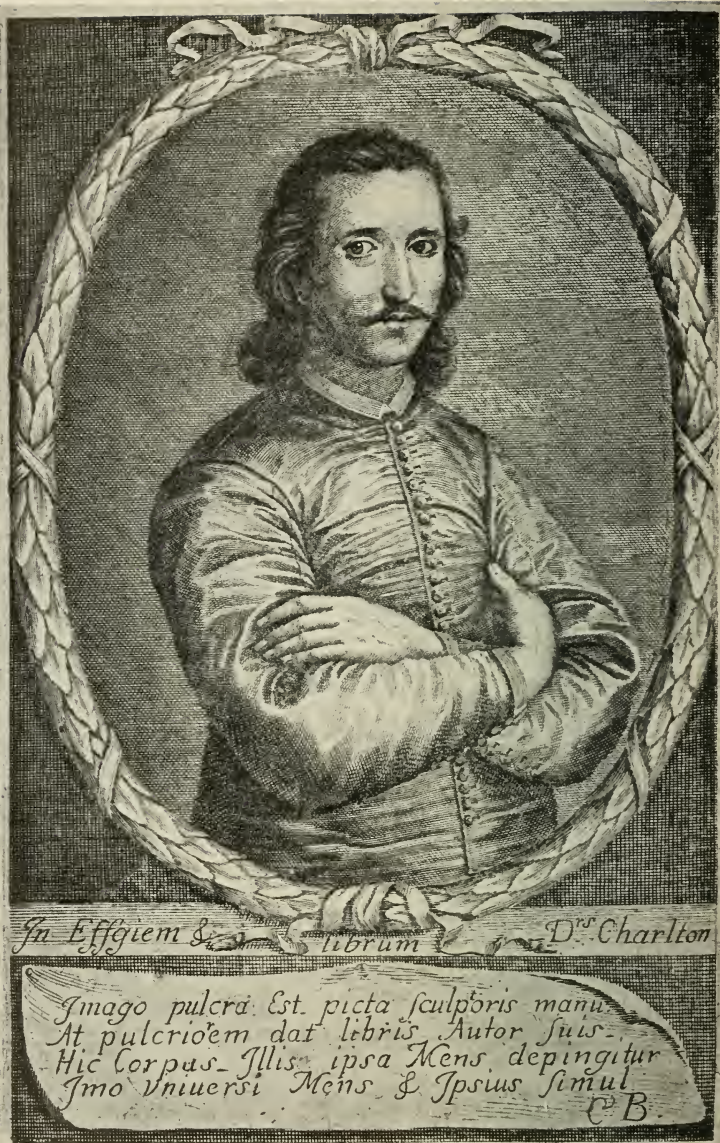
feathers the tips are normally coloured steel-blue, a few are entirely normal, but most are marked in a varying degree with brown, some having a number of broad bars, others a single bar, and others only a thin wavy line of brown. Almost all the feathers of the chin, throat, and cheeks have whitish-buff bases and many are white-tipped. A number of the feathers of the breast are irregularly marked with white and brown, and many of the flank-feathers are vermiculated with brown, as are the middle tail-feathers, upper tail-coverts, and some of the feathers of the rump. The scapulars, secondaries, and wing-coverts are also more strongly vermiculated with brown than is usual in the first winter-plumage.

The brown markings resemble those in the plumage of the female; but in my opinion this bird is simply wanting in black pigment, and this has caused the brown markings to assert themselves in a varying degree in different feathers, according to the amount of black pigment deposited. Mr. W. P. Pycraft has very kindly examined the bird and is of the same opinion, and has pointed out to me that indications of barring are observable in certain lights in normally coloured Blackcock's feathers. An examination of a large series of Black-Game in the British Museum has convinced me that the males frequently have a few brown-barred feathers, and I have a bird in my own collection with several barred feathers on the breast, but it seems a very rare occurrence for a bird to be so freely marked with brown as the one now referred to.

H. F. WITHERBY.

MEALY REDPOLLS IN SCOTLAND IN THE AUTUMN OF 1910.—Mr. W. Evans has contributed a very useful paper on this subject to the *Proceedings of the Royal Physical Society of Edinburgh* (Vol. XVIII., pp. 196-203). Mr. Evans traces the irruption from the north of Shetland to the south of Scotland. Enormous numbers (not less than 2,000 captured birds were brought into Edinburgh alone) occurred at the end of October and in November, but by the end of that month the numbers fell off, and a single bird on January 18th, 1911, is the latest of which the author has a definite record.* The great majority were of the typical form (*Linota l. linaria*), but a good many examples of the supposed large form (*L. l. holboelli*) were noted, and Mr. Evans shows that these birds vary greatly in measurements of wing and bill, and we quite agree with him in doubting the validity of Holloböll's Redpoll, more especially as it appears to breed in the same area as the typical bird (*cf.* Vol. IV., p. 292).

*I may note that I saw one on the south Yorkshire coast on April 18th, 1911.—H.F.W.



In Effigiem & librum D.^r Charleton

*Imago pulcrā Est picta sculpsoris manu
At pulcrōem dat libris Autor suis
Hic Corpus Illis ipsa Mens depingitur
Imo Vniuersi Mens & Ipsius simul*
C.B.

WALTER CHARLETON, FROM THE ENGRAVING IN HIS
"IMMORTALITY OF THE HUMAN SOUL," 1657.

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., AND NORMAN F.
TICEHURST, M.A., F.R.C.S., M.B.O.U.

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WALTER CHARLETON AND HIS
 “ ONOMASTICON ZOICON.”

BY

W. H. MULLENS, M.A., LL.M., F.L.S.

AMONG the earlier writers who contribute to our knowledge of British ornithology, Walter Charleton, the author of the *Onomasticon Zoicon*, has perhaps hardly received the attention which his writings merit. The reasons for this neglect are, however, obvious. The *Onomasticon Zoicon* was written in somewhat involved and curious Latin rarely interspersed with brief comments in English; it was not of sufficient importance to secure translation, and the date of its publication (1668) coming as it did immediately before that of Francis Willughby's famous *Ornithology* (Latin 1676, English 1678), was also prejudicial to its success. Nevertheless Charleton's work is worthy of more than the very scant notice which has been bestowed on it by the various writers and bibliographers who have dealt with early British ornithology. It is true that he does not add very greatly to the information contained in such well-known works as William Turner's *Avium. . . . historia* (1544) and Christopher Merrett's *Pinax Rerum* (1666), but many of his observations are of considerable interest, and are worthy of being rescued from the oblivion into which they have been allowed to fall.

The *Onomasticon Zoicon* has been described as “ A list with English, Latin, and Greek names of all known Animals, including an account of Charles II. menagerie in St. James's Park, followed by certain anatomical descriptions and a general account of fossils.”

This description hardly does justice to our author, as will, we think, be admitted from a perusal of some of the more interesting and important observations which we have taken from that portion of the work, some fifty-six pages in extent, which deals with birds, and with which we are here alone concerned.

The full title and collation of the work is as follows :—

Onomasticon Zoicon, / Plerorumque Animalium /
Differentias & Nomina Propria pluribus Lin- / guis
exponens. / Cui accedunt / Mantissa Anatomica ; /
et quædam / De Variis Fossilium Generibus. /
Autore / Gualtero Charletono, M.D. Caroli II. Magnæ
Britanniæ Reg- / is, Medico Ordinario, & Collegii
Medicorum Londinen- / sium Socio / Londini, / Apud
Jacobum Allestry Regalis Societatis Typogra- /
phum. MDCLXVIII.

Collation 1 vol. 4to. pp. XX un. + pp. 309 + pp.
34 un. of Indices. + several plates including 6 of
birds.

Subsequent editions appeared in 1671 (London) and
1677 (Oxford) the title in the last case being altered to
“Gualteri Charletoni Exercitationes &ct.”

Commencing with the land-birds, Charleton deals
first with the “Carnivora” as he terms the Raptores.
He gives us a long and somewhat confused list of the
eagles, vultures, falcons, and hawks, among which may
be mentioned “Peregrinus. . . . the blewbackt
Falcon, preying chiefly upon Herons,” and informs us
that it was named Peregrinus because it was always
moving from one district to another, or because its nest
could nowhere be discovered.*

“Gyrfalco, the Gyrfalcon, frequent in Ireland.”

Among the Corvidæ he notices the “Cornish Chough,”
which he tells us is abundant in Cornwall, and is there
called the “Killigrew” (*cf.* Swainson, *Provincial Names
of British Birds*, p. 74).

Amongst other birds mentioned are “Loxia the Cross-
beak or Shellaple,” which he informs us is found in
England from time to time.

* There is nothing remarkable in Charleton’s ignorance of hawks
and falcons ; long after his time we find that this subject was a constant
source of error and confusion to our Ornithologists, a confusion which
arose in part as Thomas Pennant (*British Zoology*, 4th Ed., Vol. I.,
p. 183) informs us from the fact that the various writers on natural
history chose to adopt as distinct varieties the several different
names used by the falconers to describe one species at various periods
of its life.

“Otis. . . . Tarda & Bistarda. . . . the Bustard Haec Avis in Mediterraneis (inland) Angliæ partibus frequens est,” a not particularly accurate account of the distribution of this interesting bird.

“Ruffa. . . . the Spanish Partridge with bill and legs red.” Charleton writes that this bird (the Red-legged Partridge) was common in the island of Guarnsey (Guernsey) (*cf.* Yarrell, *British Birds*, Vol. III., p. 117).

Under Passeres he notes: “Montanus of all our sparrows the most elegant; the Mountain sparrow with a reddish Crown, a black chin, and white descending from the head to the lower jaw, whence it is called amongst us the White-cap” an excellent account of the Tree-Sparrow, though the name “White-cap” seems hardly applicable.

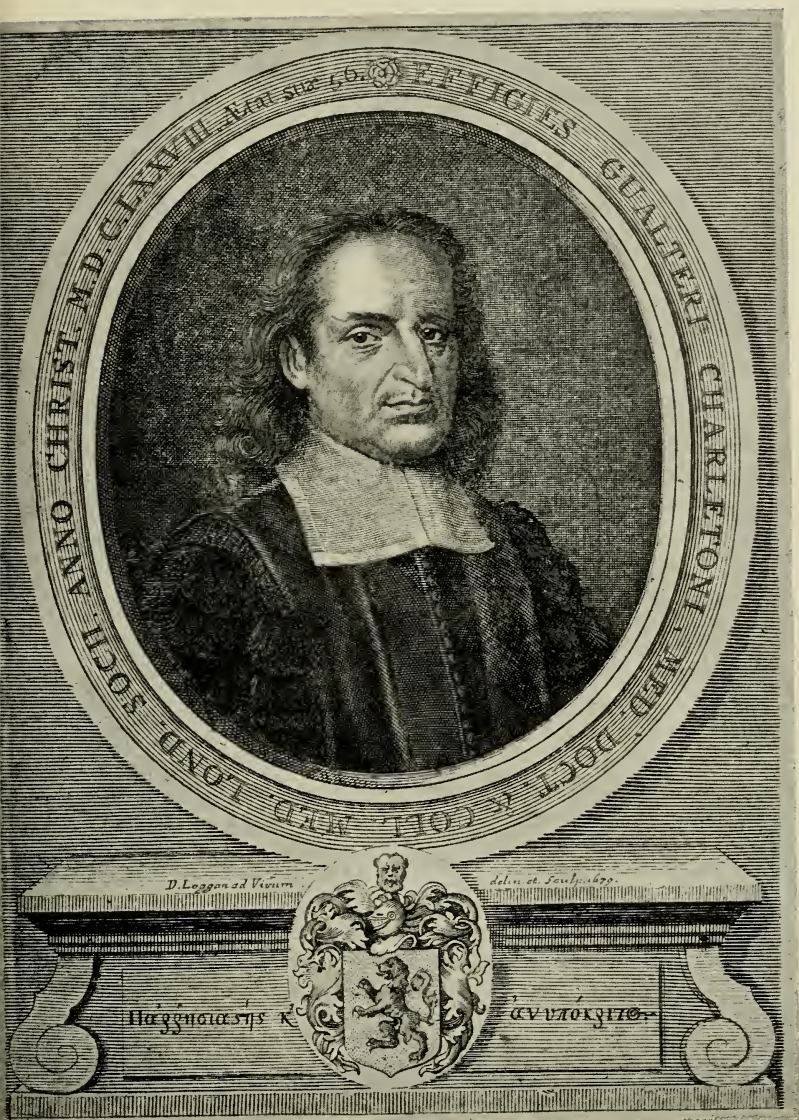
Then follow “Montifringilla the Bramble, Bramling or Brier-finch,” so called, he informs us, from frequenting and eating the fruit of brambles (*rubis*). It may be remarked that no satisfactory derivation of the name “Brambling” has yet been suggested.

“Merops the Bee-eater,” which he describes as a very rare visitor to England.

“Parus Cristatus, the crested or juniper titmouse (because it frequents juniper bushes).” It will be noticed that Charleton does not clearly say the Crested Tit was a British bird, though he implies so by giving the English name and designation. Thomas Muffet (1553-1604) in his “Health’s Improvement,” published in 1655, but written much earlier, states definitely that the Crested Tit was found in England, although he gives no authority for such a statement, and Charleton, to whom Muffet’s work was well-known, may merely have copied that writer.

“Cenanthe. . . . the Wheat Ear, White-tail, Horse-match”: Charleton notes it as a summer visitor, its frequency in Sussex and its fatness in the month of June, and tells us that in Warwickshire it was known as the Fallow-smiter (*cf.* Swainson, p. 9).

“Upupa. . . . an Hoopoop—comes very rarely into England.” Charleton then adds the curious and



WALTER CHARLETON, FROM THE ENGRAVING IN HIS
 "INQUIRIES INTO HUMAN NATURE," 1680.

well-known note that one had been killed near London in the winter time and sent to him by a friend, and that this same specimen was figured in the plate of the bird which appears in his work.

Descriptions of the water-birds then follow, amongst which we may notice "Avosetta. . . . the Scooper (because his long beak arched upward resembles the long crooked scoop with which Dutch Mariners throw up water to wet their sails)." Charleton notes that these birds visit the east coast of England in flocks in the winter time, and states that when a youth he had killed many of their young ones with leaden pellets (*globulis plumbeis confodi*) on the banks of the river Severn.

"*Avis Pugnax* the Ruff (because in fighting they raise up their feathers on the neck, like a double Ruff)." He mentions vast migrations of this bird as coming from the north into the marshes of Lincolnshire, and adds "after three months they depart, I know not where." Charleton also gives us the well-known account of the Dotterel's mimicry, which he takes from Camden, and further quotes that author's derivation of the name Knot from Canute, and adds that this bird (the Knot) is a winter visitor, and that it is then so fat as to be much beloved of gluttons (*abdomini nati*).

There is much more of interest in Charleton's notes on birds, but the above extracts will suffice to show that it is no mere list of names. In addition to the British birds he mentions many exotic ones, several of which he describes as being kept alive in the king's menagerie or vivarium, as it was then termed, in St. James's Park. This vivarium is mentioned by John Evelyn in his Diary, who notes that, in addition to the birds and beasts kept in captivity: "The parke was at this time (1664) stored with numerous flocks of several sorts of ordinary and extraordinary wild fowle, breeding about the Decoy, which for being neere so greate a citty, and among such a concourse of souldiers and people is a singular and

diverting thing" (*Diary of John Evelyn*, Vol. II., p. 178).

Walter Charleton, who, like so many of the early writers on natural history, was by profession a physician, was born on February 2nd, 1619, and was the son of the rector of Shepton Mallet in Somerset. He was educated at home and entered Magdalen Hall, Oxford, when he was 16 years of age. His tutor was Dr. Wilkins (1614-72), whose influence is said to be apparent throughout Charleton's writings. At the early age of 22 Charleton received the degree of M.D., and in the same year was appointed physician to Charles I., when that monarch was visiting Oxford, an appointment which may be regarded as a mark of favour towards the University, rather than as a proof of Charleton's professional skill, as the illustrious William Harvey was then the actual royal attendant. In 1650, Charleton seems to have settled in London. He remained true to the royal cause during the Commonwealth, and still retained his nominal appointment as physician to the exiled king. During some part of this period Charleton was residing in Russell Street, Covent Garden. At the Restoration he was continued in his office. He joined the Royal Society in 1662, being one of the first elected Fellows, and in January, 1676, he became a Fellow of the College of Physicians. Between 1660-92 he published a large number of works, the most notable of which was entitled *Chorea Gigantum* (1663), a treatise intended to prove that Stonehenge was erected by the Danes and used as a royal coronation-place. He resided for some time at Nantwich, but returned eventually to London and died there in April, 1707.

The two portraits of Charleton here reproduced are found in his works, *Immortality of the Human Soul* (1657), and *Inquiries into Human Nature* (1680). The original of the latter hangs in the Royal College of Physicians.

Charleton was a most voluminous writer, no fewer than twenty-nine printed works being attributed to him besides MSS. in the British Museum.

As a physician he does not seem to have been particularly successful, being rather a writer and observer than a practitioner, but he certainly had a considerable knowledge of and love for natural history, and his memory is worthy of respect on that account alone.

THE ALPINE RING-OUZEL.

Turdus torquatus alpestris Brehm.

A NEW BRITISH BIRD.

BY

M. J. NICOLL.

ON May 23rd, 1911, an adult male Ring-Ouzel was shot at Guestling in Sussex, and shown to me while in the flesh as a "strange-looking Ring-Ouzel." The bird was quite fresh and in perfect plumage, and it had such a



ALPINE RING-OUZEL (*Turdus torquatus alpestris*).

Male shot at Guestling, Sussex, on May 23rd, 1911.

(Photographed by M. J. Nicoll.)

generally whiter appearance than the common *Turdus torquatus torquatus*, that I at once suspected it to belong to either the "alpine" or the "oriental" form. In

comparing this specimen with skins in the British Museum, I came to the conclusion that it was an undoubted example of the Alpine subspecies *Turdus torquatus alpestris*, and as such it is an interesting addition to the British avifauna.

This handsome Ring-Ouzel differs from the typical *T. t. torquatus* in having more white on the outer webs of the secondaries, and large white centres to the feathers of the flanks and breast. The under tail-coverts are also broadly streaked with white. The form from further east, *T. t. orientalis*, of which I have an adult male from Egypt before me as I write, is intermediate between the typical and Alpine forms—that is to say, the secondaries are whiter on the outer webs than are those of *T. t. torquatus*, but not so noticeable as in *T. t. alpestris*, the under tail-coverts are as broadly streaked with white as are those of *T. t. alpestris*, but the centres of the breast and flank-feathers are only slightly marked with white ; in *T. t. torquatus* the feathers of the under-parts are only *marginated* with white, and the under tail-coverts have the *shafts only* white. In *T. t. alpestris* the white *edges* of the feathers of the under-parts are very noticeable, far more so than in either of the other two races.

Turdus torquatus alpestris has a wide range. Roughly speaking it extends, as a breeding bird, throughout middle and south Europe to the Balkans.

The occurrence of this form, for the first time on record in Great Britain, is scarcely surprising. It is possible that it has occurred before and been passed over as a Common Ring-Ouzel.

NOTES

BITTERN BREEDING IN NORFOLK.

Miss E. L. Turner sends us the extremely interesting news that a pair of Bitterns (*Botaurus stellaris*) have this year bred in Norfolk. The nest and one young one have been discovered, and Miss Turner has very kindly promised to give, in our next number, an illustrated account of her experiences.

Although the frequent occurrence of Bitterns in suitable nesting-haunts makes such an event not altogether surprising, nevertheless there has been no proof of its breeding in this country, so far as we know, since 1886, when a young bird with down still adhering to it was found in Norfolk. Eds.

ISABELLINE WHEATEAR IN SUSSEX.

I HAVE, with Mr. J. B. Nichols's kind permission, the pleasure of recording the second British example of the Isabelline Wheatear (*Saxicola isabellina*). The bird, a male, was shot at Rye Harbour on April 17th, 1911, and sent to Mr. Bristow. I examined the bird while he was skinning it, three days later, and its condition agreed with the length of time that it had been dead. It is now in Mr. Nichols's collection.

This Wheatear is very generally distributed in summer from south-east Russia and Asia Minor eastwards, while it winters in southern Arabia, western India, north-east and east Africa. The present specimen and the one obtained in Cumberland in November, 1887, would seem to be the only ones that have wandered to western Europe. It must not be overlooked, however, that its great similarity to the female of the Common Wheatear, renders it quite possible that others have occurred without being identified. N. F. TICEHURST.

ABNORMAL SONG OF WOOD-WARBLER.

ON my return from the Continent on June 2nd, 1911, I found a letter awaiting me from the Rev. W. M. Tomlinson, in which he stated that a *Phylloscopus* had been singing for a fortnight past in Bradley Wood, near Ashburne, Derbyshire, but that its song was entirely different to that of any bird of the genus with which he was acquainted. As Mr. Tomlinson is thoroughly conversant with the notes of the usual British warblers, I went down to the spot the next

day, and under the guidance of his son the Rev. C. F. Tomlinson, had no difficulty in finding the bird, which was singing steadily. As is well known, the Wood-Wren (*Phylloscopus sibilatrix*) has two phases of song: firstly, the well-known trill with its premonitory notes, which may be written "Ip, sip, sipp, sipp-sipp, sipsipp, srrèèèèèè---," and a loud and somewhat melodious "Wheou, wheou, wheou," which is much less commonly heard, but may occasionally be uttered twice or three times in succession. The latter notes are also sometimes uttered during slow flight. This bird (which I have no doubt was a Wood-Wren) began its song with the familiar "Ip, sip," but immediately afterwards burst into a full-throated bravura song, much resembling the loud burst of melody of the Common Wren, but with one or two notes which recalled the Tree-Pipit. It is impossible to write down this song in words, but it was a continuous flow of clear and varied notes, rather longer than the average Wren's song, and was uttered with apparent exertion and widely-opened bill. I should never have thought it possible for any bird of this genus to sing in a way which challenged comparison with many of our *Sylvia*. Two or three times it varied this performance by singing the "Wheou" phase, exactly as the ordinary Wood-Wren does, on one occasion flying slowly from tree to tree while singing. By June 10th, it had ceased to sing, and I could find no trace of it in its former haunts, although Wood-Wrens were still in song in several places in the same wood. F. C. R. JOURDAIN.

WREN REARING A BROOD IN AN OLD NEST.

IN a garden at Slough there is a rustic summer-house. The top of the entrance has a valance-board, outside the rustic work, on each side. On one side under the valance-board I saw, early in April, a last-year's nest of a Wren (*Troglodytes parvulus*). It was not touched. Early in June I went to look at it, and saw a Wren fly out. Since then the young birds have been seen several times, and on June 20th they were fledged. T. R. WARD.

SOUTHERN GREY SHRIKE IN SUSSEX.

ON January 2nd, 1911, a male Southern Grey Shrike (*Lanius meridionalis*) was shot near Pett, Hastings, Sussex, and was examined in the flesh by Mr. Ruskin Butterfield. This, I believe, is the third example of this species in Great Britain.

J. B. NICHOLS.

[The only previous example I know of is that recorded by Mr. J. H. Gurney as obtained near Norwich in December,

1890 (*cf.* Vol. I., p. 124), and the identification of this specimen seems rather uncertain. One was recorded by Dr. Bree as taken near Colchester in November, 1875, but this has not been accepted as an authentic example. I have examined Mr. Nichols's specimen, and find that it compares exactly with examples collected by me in southern Spain.—H.F.W.

HATCHING OF ABNORMALLY SHAPED EGGS OF SPOTTED FLYCATCHER.

ON June 3rd, 1911, in Surrey, a Spotted Flycatcher (*Muscicapa grisola*) was discovered sitting on five eggs, in a nest situated in a thick, tangled creeper growing against a wooden summer-house. The eggs were all of the unusual pale blue variety, and with the exception of one, which was marked with a single violet blotch, were entirely unspotted. Of the five eggs, there was not one that was symmetrical in shape; the inequality being most pronounced. The bird, after a day or two, would remain on the nest when inspected at a distance of only three or four feet. The eggs were all successfully hatched, and the young brood are now thriving.

It is worth mentioning that the male bird was never at any time seen, though watch was kept by more than one observer.

HENRY L. COCHRANE.

SISKINS IN HEREFORDSHIRE.

ON June 5th, 1911, I saw a pair of adult Siskins (*Chrysomitris spinus*) in northern Herefordshire. I saw them only one day, although I was frequently at the place where they appeared, both before and after.

W. S. MEDLICOTT.

DOWN-DISTRIBUTION OF NESTLING BIRDS.

It is worthy of note that newly-hatched birds of the same species show considerable individual variation in the distribution of the down, tracts being present on one nestling and absent on another. The most marked case of this which I have met with was that of a young Rook (*Corvus frugilegus*); instead of having the normal humeral, spinal, ulnar, and femoral tracts, the down was entirely absent. This is an approach to the usual condition of affairs in some other members of the Corvidæ (Jay, Magpie) which do not possess a down-plumage.

The distribution of down on the nestling Raven (*Corvus corax*) is as follows: Inner supra-orbital, occipital, spinal, humeral, ulnar, and femoral.

ERIC B. DUNLOP.

GREEN WOODPECKER IN WESTMORLAND.

ON May 12th, 1906, I saw a Green Woodpecker (*Gecinns viridis*) near Windermere. The bird evidently did not breed in the vicinity, for there was never any further sign of it. There are not half-a-dozen records of the occurrence of this species in the county.

ERIC B. DUNLOP.

[For a recent record *cf. supra*, p. 25.]

BARN-OWLS OCCUPYING A JACKDAW'S NEST.

ON May 12th, 1911, about 6 p.m., with the help of a ladder I got up to a hole in an old ash tree, which I suspected of being utilized by a Barn-Owl. When getting the ladder into position a Barn-Owl came out, and when I climbed about half way up the ladder, another Barn-Owl flew from the same hole. On reaching the hole I found it was not a large one—in fact, it must have been close quarters for the two Owls. At the bottom of the hole, which went downwards about two feet, there was a Jackdaw's nest with three eggs. The eggs were quite fresh and in no way injured by the two Owls, though how they managed to stand in the very limited space without breaking the eggs was puzzling.

C. E. TRACEY CLITHEROW.

THE RESULTS OF "RINGING" COMMON HERONS
IN DENMARK.

IN the April number of the *Dansk. Ornith. : Forenings Tidsskrift* (1911 pp. 115-119), Mr. Chr. Mortensen gives an interesting account of the results of "ringing" a number of Common Herons (*Ardea cinerea*). A Heronry at Lyngby Wood, near Frederiksværk, Zealand, East Denmark, was visited on May 16th and 17th, 1910, by Messrs. Rendtorff, Saxtorph, and Begtrup, and 55 young birds were ringed. In the course of the next ten months 13 out of the 55 had been reported to Mr. Mortensen. The following list shows the dates and places of re-capture:—

- a. June 23th, 1910. Westerwohld, near Nordhastedt, Holstein.
- b. July 2nd, 1910. Everstorf, near Grevesmühlen, Mecklenburg.
- k. October 17th, 1910. Amesbury Abbey, near Salisbury, England.
- m. February, 1911. Between Landivisiau and Sizun (east of Brest), north-west France.

These four all came from the same nest.

- c. July 5th, 1910. Bognæs Wood, near Roskilde, east Denmark.
- d. July 23rd, 1910. Balje on the Elbe (near mouth of K. Wilhelm Canal), Hanover.
- e. July 28th, 1910. Ho Bay, west Denmark.
- n. February 9th, 1911. Næsbygaard, Forlev, Sjælland, east Denmark.

These last two were from one nest.

- f. August 5th, 1910. Villanueva del Rey, Guadiato (tributary of Guadalquivir), Andalusia, Spain.
- g. September 6th, 1910. Between Hamburg and Harburg.
- h. September 10th, 1910. Neuenkirchen (W.N.W. from Harburg), Hanover.

These last two were from one nest.

- j. October 5th, 1910. Warwerort, near Büsum, Holstein.
- l. January 4th, 1911. Bourbourg, between Calais and Dunkerque, North-east France.

Mr. Mortensen remarks that the Herons, like the Teal (*D. O. F. Tidsskrift*, III., p. 124—*cf.* BRITISH BIRDS, Vol. III., pp. 251-52), had all migrated in a south-westerly direction.

CLAUD B. TICEHURST.

LONG-TAILED DUCK IN KENT AND SUSSEX IN MARCH.

IN connexion with Mr. Nichols's record (*supra*, p. 50) of a Long-tailed Duck, shot near Rye on March 31st, 1911, I have a pair, which I obtained from Mr. Bristow in the flesh, and which were shot on the same day at Jury's Gap in Romney Marsh. I have not seen Mr. Nichols's bird, but presume that it is in a similar phase of plumage to mine, the change to the darker dress being almost complete. Mr. F. Smalley, who has done a great deal of work on the plumage of this species, kindly examined my pair, and writes me that they are interesting, but quite normal, the only point about them being that the male has already got its new central tail-feathers, which is somewhat early when compared with birds obtained in Orkney about the same date. The Long-tailed Duck is one of the less-frequent visitors to the south coast of Kent and Sussex, and adult birds are always rare, and it is but seldom that they prolong their stay so late as March—in fact, I have only two previous records, one which is mentioned in *Birds of Kent* (p. 368), and the other, which does not appear to have been previously recorded, is now in the Hastings Museum. It was shot at Rye Harbour on April 21st, 1910, and is a male; its plumage-change has been fully completed.

except for two white streaks on either side of the crown. May I be allowed to express the hope that it will not be long before Mr. Smalley gives us the results of his work on the sequence of plumages in this species. N. F. TICEHURST.

COMMON SCOTER BREEDING IN IRELAND.

THE Common Scoter (*Edemia nigra*) has again nested in Ireland (cf. Vol. II., p. 86, Vol. III., p. 197, Vol. IV., p. 154). On April 29th, 1911, I arrived on the Lough they have frequented in the nesting season since 1904 inclusive, and was told that one male and two females had been seen. On May 6th I saw the three birds and on June 6th the male alone. On July 6th I saw on the lake, not far from an island, where I had searched for and failed to find the nest, a female Scoter with at least eight young ones, probably not many hours hatched out—my boat was at no time nearer to them than about 75 yards (it was my wish not to disturb them), but the old bird uttered cries similar to those in 1905, which sounded to me like the plaintive mewing of a cat, and which no doubt are notes of warning to the young ones. On July 7th, while watching the old bird and her brood from my boat at a distance of not less than 200 yards with my Zeiss binoculars, they dived simultaneously, but rose to the surface independently of each other; on other occasions I saw them, but it was not till July 12th that I definitely ascertained that there were eight young ones, on that day at any rate; previous to this they had kept too close together for accurate observation. I hope they will arrive at maturity, but they have enemies, e.g. pike, Herons, Greater and Lesser Black-backed and Herring-Gulls.

In two previous years, viz., 1907 and 1908, there was, as this year, a solitary female on the Lough.

I am inclined to think that after the female has been sitting a day or two, the male bird leaves the locality, perhaps for the sea—on one occasion only have I seen the male after I knew his mate was sitting, and then she had been incubating for a day or so only.

HERBERT TREVELYAN.

DOTTEREL IN LANARKSHIRE.

ON May 25th, 1911, on a moor in the Blantyre district of Clyde, while searching a marshy place for young Redshanks, I unexpectedly put up a Dotterel (*Eudromias morinellus*). It was very loth to rise, for I must have passed and repassed it a few times before it took wing, and then it only flew about twenty yards, alighting behind a large grass-grown mole-

hillock. On making a little detour I came within full view of it, and had ample opportunity of examining it with binoculars before it again took wing, and as before, only going a little distance. I again followed, and had another good look at it, but when it rose this time it put a much greater distance between us.

It looked in beautiful breeding-plumage, and I have no doubt was resting on its northward passage to its breeding-quarters. The white stripes on the side of the head, white on the throat, and the broad band of reddish-chestnut on the lower breast, were all very conspicuous. WALTER STEWART.

WHITE-WINGED BLACK TERNS IN NORFOLK.

IN addition to the flock of White-winged Black Terns in Sussex which Mr. Ford-Lindsay mentions (*supra*, p. 54), I am able to state the presence of two individuals on one of the Norfolk Broads on May 16th, 1911, thirteen days earlier than those recorded by Mr. Ford-Lindsay. They were seen by a well-trained observer, who writes me that they played around him for a considerable time on the Broad, with eighteen Black Terns, sometimes coming as near as within two yards. The red colour of their legs and beaks showed plainly in contrast with those of the Black Tern, which are dark.

J. H. GURNEY.

NESTING OF THE COMMON TERN IN THE ISLE OF MAN.

ON June 10th, 1911, while at a colony of Arctic Terns long established at the Point of Ayre, Isle of Man, I found a small colony of Terns, four to five pairs perhaps, the species of which I was not then able to determine, breeding on the same shingle-bed and within a couple of hundred yards of the Arctic Terns. A subsequent visit on June 18th, resulted in my obtaining one of the nesting birds, which proved to be an adult Common Tern (*Sterna fluviatilis*). This, the first recorded appearance of the Common Tern as a nesting species in Man, is perhaps significant in view of the extensive building operations that have been taking place at Walney Island, off the Lancashire coast, some fifty miles away, and where colonies of Arctic, Lesser, Common, and Sandwich Terns exist, or did so up to within very recently. Perhaps the Sandwich Tern too may establish itself shortly as a nesting species, on the quiet sand and shingle-wastes of the Ayre.

M. V. WENNER.

SOOTY TERN IN SUSSEX.

ON April 24th, 1911, a man named Hill saw a bird in difficulties on the rocks at Black Rock, just beyond the eastern boundary of Brighton. He ran after it and caught it, and brought it to Messrs. Pratt, the taxidermists, at Brighton, who recognized it as a Sooty Tern (*Sterna fuliginosa*). It was in the last stage of exhaustion, but showed no outward signs of injury. Dr. Langton, M.B.O.U., saw it before it was skinned. Having been exhibited at the British Ornithologists' Club on May 10th, 1911, it was purchased for the Booth Museum, where I hope it will be on view shortly.

ARTHUR F. GRIFFITH.

HERRING-GULL'S NEST WITH FIVE EGGS.

ON May 22nd, 1911, I found a nest of a Herring-Gull (*Larus argentatus*) containing five eggs, on the Island of Maleggan in the Scilly Isles. Two birds might have been using one nest to account for this, but I should say that all the eggs were laid by the same bird. This was the only nest of the Herring-Gull I found on this particular island, which is little more than a rock. The nest could not have been tampered with, owing to the difficulty of landing on the island, and I understand we were the first persons to land there this year.

H. W. ROBINSON.

[Leverkühn (*Fremde Eier im Neste*, p. 1) says that on Sylt he found double clutches of five and six eggs both of the Herring-Gull and also of the Common Gull (*Larus canus*). In all cases it was evident that the eggs were laid by two hens.—F.C.R.J.]

EXTRAORDINARY DEVOTION OF SOME BIRDS
TO THEIR NESTS.

LAST year I gave an instance of extraordinary devotion on the part of a pair of Lesser Whitethroats to their nest (Vol. IV., p. 148); some further instances have lately come under my observation. The first is that of a Tree-Pipit (*Anthus trivialis*), which was sitting on five eggs when I first saw it. I was at once struck by the pugnacious attitude the bird assumed, flapping about, uttering a shrill note the whole time. Passing the spot on the following day, I looked to see if she was all right, and there she sat with mouth open looking at me and simply refusing to move. I was so impressed that I walked back to the cottage where I was staying (some four miles away) and returned with my camera. The bird sat still with open mouth, and watched me as I opened out the grass and other vegetation to see the nest. Nor

did she move as I focussed and took a photograph. I also photographed her feeding the young, which operation took place in the most matter-of-fact manner, whilst I was only a few feet away. The camera was just placed in front, and I stood by the side and waited for her to arrive, which she did in a very short time, bringing a large, green caterpillar. I noticed she made this do for three of the young. I also watched her swallow the *fæces* of the young. The cock bird did not once venture near the nest, but kept up a constant note of alarm from a distance. I think anyone who has tried to photograph the Tree-Pipit will agree with me that the above facts are by no means usual.

The second case was that of a Redshank (*Totanus calidris*) whose nest was on the open marsh, and it was quite the custom for the "lookers" to pick the bird off the nest, see if the eggs were all right, and put her back, when she would brood over them like an old hen. This again is by no means an easy bird to photograph, even when using a hiding-tent.

The third case concerned a Robin (*Erithacus rubecula*). Whilst walking down a lane I met a small boy, and seeing that he had a bird in his hand, I stopped him and asked what it was. He said: "A Robin; I picked it off the nest." Finding the nest was only a short distance away, I told him to take me to it. It was in a bank, and contained four newly-hatched young. I pointed out the cruelty of taking away the mother-bird, and said he was to let her go. This he did angrily, by throwing her on the bank. Notwithstanding all this, the devoted little bird fluttered straight on to her young, and brooded over them. The boy departed with some coppers instead of the Robin, and it seemed a happy ending, but I regret to say that the following day I found the nest pulled out, and the young lying dead at the foot of the bank.

H. W. FORD-LINDSAY.

BIRDS IN NORFOLK IN 1910.—Mr. J. H. Gurney's annual "Ornithological Report for Norfolk" for 1910 (*Zool.*, 1911, pp. 161-75), although rather wanting in novelties, is none the less a useful record of events.

Four Spoonbills (*Platalea leucorodia*) arrived at Yarmouth on May 8th, and one was seen at Breydon on the 15th, while on the 27th a second appeared, and another on June 24th.

On May 13th a Roller (*Coracias garrulus*) was seen at Garboldisham.

A female Crane (*Grus communis*), shot at Thornham, is reported in August, but we have already several times given our opinion for suspecting Cranes to be "escapes."

On August 9th a Caspian Tern (*Sterna caspia*) was watched at a range of fifteen yards for half an hour by Mr. Jary on Breydon.

A Yellow-browed Warbler (*Phylloscopus superciliosus*) and an Ortolan Bunting (*Emberiza hortulana*) were "identified" by Mr. F. Richards at Cley, on September 16th.

From October 15th onwards, a rather unusual number of Rough-legged Buzzards (*Buteo lagopus*) occurred.

A Little Owl (*Athene noctua*) was caught in February at Costessey, while six were received at Snettisham during the autumn.

Mr. Gurney also makes some remarks on the grain-eating propensities of the Starling, but as these are founded on only a very few specimens killed in one place in one month, no conclusions should be drawn from them.

In his remarks on Crossbills, Mr. Gurney discusses the supposed English form, evidently without reference to what Dr. Hartert has said in this Magazine (Vol. III., p. 294). A nest of a Crossbill found at Swannington, near Attleborough, on April 16th, 1910, by Mr. W. G. Clarke, has not, we think, been mentioned in our pages.

UNCOMMON BIRDS IN THE GLASGOW DISTRICT.—In the *Glasgow Naturalist* for February, 1911, there is a useful article on "The Birds of East Renfrewshire," by Mr. J. Robertson, in which we find mention (p. 52) of a Gadwall (*Anas strepera*) shot at Eaglesham, on December 9th, 1904. In the May issue of the same journal, Mr. C. S. B. Renshaw records (p. 96) that he saw a Black Tern (*Hydrochelidon nigra*) at Foxbar (Renfrew) on April 19th, 1911, and that a Turtle-Dove (*Turtur communis*) was shot in the same county early in June, 1911.

INTERBREEDING OF SONG-THRUSH AND BLACKBIRD.—Mr. G. E. Adamson records (*Zool.*, 1911, pp. 194-6) the mating of a hen Song-Thrush (*Turdus musicus*) and a male Blackbird (*T. merula*) at Edgwarebury, Middlesex, in March, 1910, the result of which was a typical Song-Thrush's nest, and four eggs, which had a whitish-green ground-colour, and light brown clustered markings. One of the eggs measured 29 by 21 mm. They were slightly incubated, but the nest was afterwards abandoned. Mr. Adamson considers that the male influences the colour of the egg-shell in such a case, but this seems impossible of belief.

NIGHTINGALE IN SCOTLAND.—The Misses E. V. Baxter and L. J. Rintoul report (*Ann. Scot. Nat. Hist.*, 1911, p. 132)

that they obtained an example of *Daulias luscini* on May 9th, 1911, on the Isle of May. The Nightingale has not been previously recorded from Scotland.

ICTERINE WARBLER IN SHETLAND.—Mr. G. W. Russell records (*Ann. Scot. Nat. Hist.*, 1911, p. 183) that a bird obtained on May 15th, 1910 at Lerwick, has been identified by Mr. W. Eagle Clarke as a specimen of *Hypolais icterina*, which has only once before been recorded for Scotland.

PIED FLYCATCHER NESTING IN HADDINGTONSHIRE.—The Rev. H. N. Bonar describes how he found the nest of a pair of *Muscicapa atricapilla* near the town of Haddington in May, 1911, and afterwards watched the birds (*Ann. Scot. Nat. Hist.*, 1911, p. 182). The Pied Flycatcher breeds only exceptionally in south-east Scotland.

CUCKOO IN GOLDCREST'S NEST.—While recently investigating the authorities for some of the rarer foster-parents of the Cuckoo, I had occasion to refer to Herr A. Walter's original record of three Cuckoo's eggs found in one nest twice in a season (*cf. supra*, p. 58). On turning to the *Ornithologische Monatsschrift* for 1893, pp. 463-66, I was surprised to find that the article does not refer to the Goldcrest at all, but to the Common Wren (*Troglodytes parvulus*). Herr Walter uses the popular name "Zaunkönig" throughout, which, though occasionally applied to *Regulus cristatus*, obviously refers here to *Troglodytes parvulus*. First-hand confirmatory evidence is very desirable in the case of many of the rarer fosterers, as several seem to have been recorded on somewhat unsatisfactory grounds, but for this purpose only the evidence of the actual finder has any real value.—F.C.R.J.

ALPINE SWIFT IN HAMPSHIRE.—Mr. R. S. Mitford records (*Zool.*, 1911, p. 278) that he saw an Alpine Swift (*Cypselus melba*) at Brockenhurst (New Forest) on May 28th, 1911.

"LUMINOUS OWLS."—In the *Irish Naturalist* (1911, pp. 124-26) Miss M. E. Dobbs has an article describing lights frequently seen at Villierstown (co. Waterford), which appeared to emanate from birds of some kind. It is curious that no one has so far been able to procure one of these "luminous" birds, and until this has been done the cause of the "luminosity" must remain a matter for speculation.

MARSH-HARRIER IN KENT.—Mr. Collingwood Ingram announces (*Zool.*, 1911, p. 279) that he saw a specimen of *Circus æruginosus* in Thanet on June 22nd, 1911.

HONEY-BUZZARD'S NEST IN DURHAM.—Mr. O. V. Aplin states (*Zool.*, 1911, p. 237) that Mr. Isaac Clark has given him particulars of a nest of *Pernis apivorus* built in some beech-woods on the banks of the Derwent in 1899. The nest contained two young, early in August of that year. Mr. Aplin acknowledges the assistance of Mr. Heatley Noble in tracing this record. The only other recent instance of the breeding of this bird in Great Britain, appears to have been in Herefordshire in 1895, as recorded by Mr. W. E. de Winton (*Zool.*, 1895, p. 383).

OSPREY IN RENFREWSHIRE.—Mr. T. Malloch reports (*Zool.*, 1911, p. 237) that he found a male Osprey (*Pandion haliaetus*) lying dead with the head destroyed, in a glen in north-west Renfrewshire, on May 19th, 1911. The bird had been dead some time.

WIGEON BREEDING IN ARGYLLSHIRE.—Mr. C. H. Alston records the finding and satisfactory identification of a nest of *Mareca penelope* on an island of Loch Awe in May, 1911, and a note by Mr. J. A. Harvie-Brown informs us that Mr. W. Evans has known of Wigeon breeding in the Loch Awe district about ten years ago and in 1906, while a nest was also found in 1908 by the Misses Baxter and Rintoul (*Ann. Scot. Nat. Hist.*, 1911, p. 183). It is therefore fairly certain that the Wigeon has been a regular nester in this district for some time.

COURTSHIP OF THE RED-BREASTED MERGANSER.—Dr. C. W. Townsend describes in the *Auk* (1911, pp. 341-45) the "nuptial performance" of *Mergus serrator*, as observed in New England (U.S.A.). "The drake begins," he writes, "by stretching up his long neck so that the white ring is much broadened, and the metallic green head, with its long crest and its narrow, red bill, makes a conspicuous object. At once the bill is opened wide and the whole bird stiffly bobs or teters [*sic*] as if on a pivot, in such a way that the breast and the lower part of the neck are immersed, while the tail and posterior part of the body swing upward. This motion brings the neck and head from a vertical position to an angle of forty-five degrees. All the motions are stiffly executed, and suggest a formal but ungraceful courtesy." Dr. Townsend

also refers to the "song," which accompanies these actions, and this he describes as "a loud, rough and purring, slightly double note which I write down *da-ah*, but the note is probably insusceptible of expression by syllables."

TURTLE-DOVE AT THE ISLE OF MAY.—Mr. W. Evans records that he saw a specimen of *Turtur communis* on the Isle of May on June 1st, 1911 (*Ann. Scot. Nat. Hist.*, 1911, p. 184).



LETTERS



THE PLUMAGES OF THE GUILLEMOT AND RAZORBILL.

To the Editors of BRITISH BIRDS.

SIRS,—While it must be well known that the “fledgling” Guillemot (*Uria troile*) and Razorbill (*Alca torda*) resemble in all essentials of their coloration the adults of their respective species when in summer-plumage, extending even to the white stripe in front of the eye in the case of the Razorbill, it does not seem to have been recognized that this plumage answers to the “mesoptyle” or second generation of down-plumage in other birds, e.g. the Tawny Owl. Yet this, I believe, to be a fact, and accordingly I draw the attention thereto of the readers of BRITISH BIRDS, who are interested in all that pertains to plumages and their changes. I am not sure, yet, as to what obtains in the case of the young Black Guillemot (*Uria grylle*) of the same age, which seems to resemble the adults in the *winter* dress, but the plumage of such young birds will, I believe, also prove to be of the “mesoptyle” generation. The young Little Auk, like the Guillemot and Razorbill, resembles the adult in summer, and wears a “mesoptyle” plumage. The long woolly down of the Puffin, which differs so conspicuously from that of its congeners will prove, I believe, to be made up of a “protopstyle” and degenerate “mesoptyle” down. It would seem therefore that my contention, that the “mesoptyle” plumage answers to a more or less degenerate adult dress, is well founded.

Pressure of other work makes it impossible for me to go minutely into the questions here raised just now ; accordingly I draw the attention of others to the matter, in order that, if possible, fresh material may even yet be obtained this summer for the final settlement of the points I have raised.

W. P. PYCRAFT

“ON A PECULIAR TYPE OF FEATHER IN THE WATER-RAIL.”

To the Editors of BRITISH BIRDS.

SIRS,—Referring to my article in last month’s BRITISH BIRDS “On a Peculiar Type of Feather in the Water-Rail” (pp. 42-44), my attention has since been drawn to a short notice by the Rev. M. C. H. Bird in the *Transactions of the Norfolk and Norwich Naturalists’ Society*, Vol. VI., p. 117, in which he makes mention of these feathers. I much regret that this note was not known to me before, as I had, of course, no intention of depriving Mr. Bird of the credit of having been the first to point out this peculiarity in the Water-Rail.

J. LEWIS BONHOTE.

RATS AND MANX SHEARWATERS.

To the Editors of BRITISH BIRDS.

SIRS,—On the question raised by my note in your last number (p. 55) as to the presence of rats on the Island of Annet in the Scilly Isles, I have made careful inquiries from those who are most in the habit of visiting that island, and they all say that there are none there to their knowledge, but that these rodents are present on the islands of Arthur, Sampson, Tresco, St. Helens, and some of the small eastern islands.

I should have written the word “some” instead of “many” when mentioning the number of Manx Shearwaters’ skins found turned inside out.

It is very probable that the larger species of Black-backed Gull swallows these birds whole, as it does Puffins, for their holding capacity is enormous, a friend of mine extracting a large eel measuring eighteen inches in length from a nestling in the down last month. The eel was minus its head—absorbed in the process of digestion—and its tail was protruding fully an inch from the chick’s beak.

H. W. ROBINSON.



A YOUNG BITTERN IN NORFOLK, JULY 9TH, 1911.

(Photographed by Miss E. L. Turner.)

BRITISH BIRDS

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THE RETURN OF THE BITTERN TO NORFOLK.

BY

E. L. TURNER.

[PLATE II.]

“QUITE like old times, Miss, to have Bitterns nesting and booming around,” was the casual but somewhat startling greeting addressed to me by an angling friend two days after my arrival in Norfolk. I immediately “fetched up alongside” and made further inquiries; finding he had no definite knowledge of the exact locality, I asked him to obtain for me certain particulars as soon as possible. My friend returned the next morning with more details, and at 10 a.m. Vincent and I set off—first of all to obtain permission from “the powers that be” to hunt for the nest, and, having obtained this we settled down to watch.

The never-to-be-forgotten 8th of July was a terribly hot day, and I cannot say that either of us felt particularly hopeful as we climbed to the ridge of an old boat-house at 2 p.m., armed with a large slice of bread and cheese and a bottle of lemonade by way of lunch, and newspapers to protect the back of our necks from the blazing sun. From our vantage-point we commanded a view over a wide stretch of reed-bed, in the vicinity of which the Bitterns were said to be seen daily.

After about three-quarters of an hour's watching, I suddenly saw a large, bright brown bird rise from the reeds on our left, and exclaimed, “Look!” “That's the Bittern,” said Vincent; and jumping to our feet we had our first prolonged view of the bird, as with slow, heavy flight she swept across the marsh. In the brilliant sunshine and against a background of green trees, the bird appeared to be a bright cinnamon-brown: her slow, flapping flight resembled that of a Short-eared Owl, whilst in shape she was like a Heron, as with head thrust back; straight, keel-shaped breast-bone in advance, and long legs stretched out behind, she seemed to drift lazily along, and finally dropped into a dense reed-bed some

distance away. We kept our eyes carefully on this spot for about a quarter of an hour, after which the Bittern rose and returned in the same leisurely manner to the place where I had first seen her get up. She repeated this journey to and fro three times before 4.30.

We next had to decide which of these two spots contained the nest and which was the feeding-ground only. From the nature of the marsh we concluded that the nest, or young, must be somewhere near the place where we saw the bird first drop ; and from her manner of working, we decided in our own minds that the young were scattered.

We then moved to a big alder tree, up which Vincent and another watcher climbed, dragging me behind them. From this, to me very uncomfortable, position, we commanded a closer view of the reed-bed, and again saw the Bittern drop down into its depths. At the end of an hour I feebly protested that my position was unendurable, so they lowered me to a branch upon which I could stand with comparative ease, while Vincent plunged into the reed-bed. We immediately lost sight of him, and could only judge of his whereabouts by the clouds of pollen which arose at intervals from the marsh ; but that he was hot upon the trail we felt certain, for the old bird flew up with hoarse "honking" call-notes, six or seven times, took short flights, and dropped again. Presently Vincent emerged, panting and wet and unsuccessful, so we adjourned for tea.

From 6.30 to 7.30 we watched from a bank, but as there was no sign of any Bittern we both plunged into the reed-bed, determined to make a thorough search before dark. The water was above our knees, and the reeds were so dense that neither of us could see the other when a few yards apart. We soon put up the old bird, and then Vincent suggested that I should stand still while he worked in circles round me. At last came a joyful shout, "I've got one youngster ; come, quick"—and I pressed forward headlong in the direction of his voice.

How we gloated over our prize as he stood there, transformed into the semblance of a bunch of reeds ! With long, pointed bill thrust straight upwards, bright eyes half closed, the feathers of his head and neck smoothed downwards, their alternate dark and light markings blending with the reeds ; while even the bird's bulky body, owing to its broken-up colouring, seemed absolutely to "melt" into its surroundings ; the big green legs and feet being partially submerged in water, might easily have been mistaken for reed-stalks (Fig. 1).



FIG. 1.—TRANSFORMING HIMSELF INTO THE SEMBLANCE OF A BUNCH OF REEDS.

It was now 8.30 and the sun was setting. What was to be done with the young Bittern now we had found him ? I insisted on some third person seeing our captive, lest the unbelieving world should scoff, so I carried the wild, beautiful thing to dry land. This was no easy task :

to begin with, I was too excited to hold him, and he could not be tucked under my arm because of sundry fierce thrusts upwards which he made with his bill. We had for the moment lost our "sense of direction," but guided by the sunset glow we stumbled on and soon hit our trail and emerged triumphant. After stowing the bird safely away for the night, by alternate rowing, cycling, and rowing we returned home, finally reaching my house-boat at about 10.15. I changed into dry clothes, and in spite of considerable anxiety, slept soundly till 2 a.m.

We started away again at 3 o'clock, this time provided with wading-boots, cameras, and other necessities—as much as two bicycles could possibly carry. By 4 a.m. I had the young Bittern once more in my arms, safe and sound. When I put him on the ground he stalked off in a solemn, and what was intended to be a very dignified, manner, but in reality he appeared very ludicrous, for with big green legs and splayed feet, drooping wings and head held high in the air, he looked like a tall, gaunt old woman masquerading in bird's attire (Plate 2). But when put back into his natural surroundings, one saw how this seemingly ludicrous attitude was an instinctive pose—tending to self-preservation, and rendering him more or less inconspicuous.

It seems curious that so big a bird should be able to support itself on the slender reed-stems, but we had to a great extent been guided to the vicinity of the young by the bent and broken reeds, many of them withered and dying, but unmistakable evidence of the Bitterns' whereabouts.

The young bird emitted a curious bubbling note; this can easily be imitated by blowing through a straw into a glass of water, and is quite distinct from the hoarse call-note of the adult bird, which is not unlike that of the Great Crested Grebe, but shorter and sharper.

Having finished photographing the young Bittern, we hunted round after the nest, but being anxious for the



FIG. 3.—CROUCHING.



FIG. 4. STRIKING UPWARDS.

safety of the bird which now began to "bubble" in a way likely to attract his parents, we gave up the search and left him in peace.

His method of defence was curious. He would crouch low down as in Fig. 3, fluffing out his feathers into a kind of ruff, then suddenly strike upwards, rising to his full height as in Fig. 4. This heaving up and down was not unlike that of a young Cuckoo when molested. Except for the undeveloped wing-coverts and quills, the young Bittern seemed to be fully feathered, though, of course, unable to fly. In general coloration he was perhaps rather brighter than the adult bird, but the barred markings on the wings were not so distinct. We tried to feed him by opening his bill, and thrusting food into his capacious pouch. This, however, he promptly disgorged; and as we saw no actual food carried by the parent, it is probable that the young are fed by regurgitation.

On July 17th we made a thorough search for the nest. There were then five of us, and by working abreast through the reed-bed from dyke to dyke, our efforts were soon crowned with success, the lucky finder in this instance being the Rev. M. C. H. Bird. The nest was scarcely a dozen yards away from the spot where Vincent had first discovered the young bird. It was composed almost entirely of broken reed-stalks, and measured only fourteen inches across the top, though much wider at the water's edge; but no doubt it had been considerably reduced and trampled down by the nestlings, for judging from the inch-deep debris of discarded feather-sheaths, more than one inmate must have been successfully reared. In addition the nest contained bits of down, two or three small striped feathers, and a few fish-scales (Fig. 5).

We saw nothing of either old or young birds in the nesting-area until about 6 p.m., when one of the adult birds rose from a neighbouring reed-bed and dropped once more into the old feeding-ground; being disturbed by a

passing yacht, she flew slowly back again, passing so close to me that I could have photographed her on the wing, but alas, my camera was reposing on the nest some distance away ! She then dropped into a distant reed-bed where, several days afterwards, young Bitterns were flushed twice in succession, at such short intervals that one may safely infer that they were not one and the same bird, but two separate young ones.

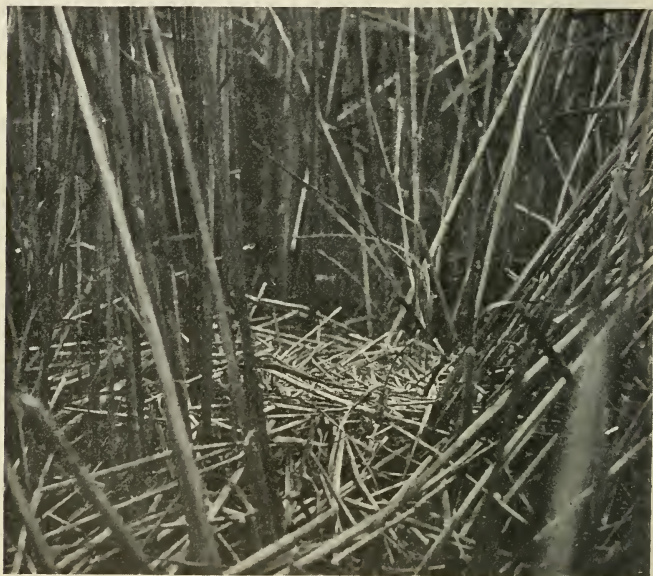


FIG 5.—THE NEST.

The following dates have been supplied me by a reliable watcher, who seems to have taken an interest in these birds from their first arrival, and kept an eye on them ever since. They were first seen during the third week in December, 1910 ; there were then *three* adult birds. Booming began on January 26th, 1911, and was continuous both night and day during March, April, and May until June 4th, since which date this sound has not been heard.

We judged the half-fledged bird we found on July 8th to be from four to five weeks old ; now, if the male ceases to boom when the young are hatched, the natural inference is that both parents feed the young. As we failed to see two adult birds together on either occasion, we feared that one might have been destroyed. However, I have since felt somewhat reassured on this point, as the watcher before mentioned goes on to say : “ I presume both birds *are* and *have been* here all the time, but I have not seen two at one time since January 26th.”

It is obvious, therefore, that Bitterns work very warily ; and it may be that the young bird we found was the last one hatched, and that the others had already been moved across the intervening dykes and gradually lured away.

There is no doubt that the Bittern, though a night-feeder, nevertheless feeds its young at regular intervals all day, for on the first occasion we saw the old bird drop near the nest three times between 2 and 4.30 p.m., while others whom we questioned have seen them working to and fro at all hours of the day.

One can only hope, as the adult birds have roamed at large unmolested for over eight months, re-awakening long-forgotten echoes with their curious booming, that public interest and public opinion will continue to protect both old and young. If this be the case, there is no reason why the Bittern should not establish itself once more as a regular breeding species here and there on the marsh-land, though it is never again likely to become so numerous as to furnish a regular Sunday dinner for the gamekeeper, which was formerly said to be the case in one district !

Having watched this curious and beautiful bird at home in our own marsh-land, I would like to share the joy with every real bird-lover ; and I sincerely hope that within the next few years, the good luck which seems to dog my footsteps may be equally the portion of every ornithologist who has the real welfare of birds at heart.

RECOVERY OF MARKED BIRDS (ABERDEEN UNIVERSITY).

BY

A. LANDSBOROUGH THOMSON, M.A., M.B.O.U.

SINCE the institution of the Aberdeen University Bird-Migration Inquiry in 1909, over two hundred marked birds have been reported. Many of these records are of course quite insignificant, but most, I am confident, will have some value when the time comes for their classification and correlation. The few records quoted below are selected from those which have a certain individual value and interest, apart from other records and facts. Most of these records are included in a paper on "The Possibilities of Bird-marking, with special reference to the Aberdeen University Bird-Migration Inquiry," published in the *Proceedings of the Royal Physical Society of Edinburgh*, Vol. XVIII., pp. 204-18; and in shorter form many of them were published in a circular which was copied by various newspapers. The first Wigeon record was published by me in *BRITISH BIRDS*, Vol. III., p. 220, and both the records were briefly given by Mr. Gunnis in the *Annals of Scottish Natural History*, 1911, p. 118. No description of methods is necessary here, and we may at once proceed to the enumeration of the records we have selected.

A brood of five Wigeon ducklings (*Mareca penelope*) was marked by Mr. Francis Gunnis on Loch Brora, eastern Sutherland, Scotland, on June 19th, 1909. One of these (A.U. 2052) was caught on September 3rd, 1909, in a duck-decoy at Westpolder, Ulrum, province of Groningen, north-eastern Holland, as reported by Mr. H. J. Louwes of that place. A second member of the brood (A.U. 2050) was shot early in January, 1911, on the river Trent, about four miles above Gainsborough, where it forms the boundary between the English counties of Lincolnshire and Nottinghamshire; it was reported by Mr. John Allison, Retford.

Out of a number of Lapwings (*Vanellus vulgaris*), marked as young birds during the summer of 1910, in the north-east of Scotland (all within twenty miles of Aberdeen), the following interesting "recoveries" have been reported:—

No.	Date.	Locality.	Name of Marker and Reporter.*
A.U. 14077	Oct. (?) 1910†	20 miles N. of Oporto, Portugal	Lt.-Col. A. V. Anderson Mr. W. C. Tait
A.U. 12730	About Nov. 18, 1910	Thurles, co. Tipperary, Ireland	Mr. W. W. Nicol Mr. James Ryan
A.U. 8545	About Nov. 22, 1910	Frenchpark, co. Roscommon, Ireland	Mr. Sidney Harris Mr. L. N. G. Ramsay
A.U. 12731	Dec. 29, 1910	Elvas, Alemtejo, Southern Portugal	Mr. W. W. Nicol Mr. João F. da Silva Miranda
A.U. 14370	About Feb. 5, 1911	Michaelstown, co. Cork, Ireland	Capt. W. H. Ritchie Mr. J. A. Fraser
A.U. 14699	Feb. 13, 1911	Croagh, co. Limerick, Ireland.	Lt.-Col. A. V. Anderson Mr. George Sherwood

With these may be compared the records of Lapwings (marked with BRITISH BIRDS rings) which travelled from Stirlingshire to co. Kilkenny, Ireland, and to Basses Pyrénées, France, respectively (*cf.* BRITISH BIRDS, Vol. IV., p. 336; Vol. III., p. 251).

Over a hundred Herring-Gulls (*Larus argentatus*) were marked as young birds by Mr. Lewis N. G. Ramsay and others, during the summer of 1910, at two localities on the Aberdeenshire Coast (Hummel Craig, Collieston,

* Marker's name first in each case.

† The date seems early when compared with the other records and with Mr. Eagle Clarke's statement, that there is no evidence of southward emigration from the British Isles before November (*British Association Report*, 1902, p. 280); but as this record was not reported till several months afterwards, too much importance need not be given to the approximate date assigned.

and the Dunbuy Rock, Cruden Bay). Of these the following have been recorded :—

No	Date.	Locality.	Reported by.
A.U. 10963	Sept. 8, 1910	Saltfleet, near Mablethorpe, Lincolnshire	Mr. G. W. Hollis
A.U. 10624	Sept. 13, 1910	Aberdeen Harbour	Mr. George Allen
A.U. 16055	Sept. 1910	Ryhope, near Sunderland	Mr. J. Cope
A.U. 10650	About beginning of Oct. 1910	Tayport, Fifeshire	Mr. J. Aimer
A.U. 10952	Oct. 3, 1910	Hunstanton, Norfolk	Mr. R. W. Dodman
A.U. 10815	About Oct. 12, 1910	Eden Estuary, near St. Andrews	(Newspaper cutting)
A.U. 15901	Nov. 15, 1910	Aberdeen	(Brought in)
A.U. 15937	About Jan. 30, 1911	Near Manchester	Mr. W. Yates

The distinct evidence of considerable southward movement contained in these records, is of interest when compared with the evidence of stationary habits obtained by marking large numbers of this species at the colony on Memmert, at the south-eastern corner of the North Sea (Thienemann, *Journal für Ornithologie*, 1910, p. 632) ; and we have ourselves a record of a Herring-Gull (A.U. 12140), marked as a young bird at Loch Aan Eilean. the Lewis, Outer Hebrides, by Mr. Andrew Harley, on June 7th, 1910, and shot at Stornoway (Lewis) at the beginning of December, 1910, as reported by Mr. F. A. Lowe. A record of a different kind, but for the same species, is that of a bird in first plumage caught by Messrs. L. N. G. Ramsay and A. G. Davidson on the night of October 3rd, 1910, on the shore a few miles north of Aberdeen, along with a number of others which were dazzled by bright acetylene cycle-lamps. On May

20th, 1911, it was re-caught at Nap, Burray, Orkney, by Mr. David Sinclair, who turned round suddenly and caught this bird from among those following him as he worked among the turnips. Reported by Mr. W. J. Marcus in the *Aberdeen Free Press*, May 26th, 1911.

A Black-headed Gull (*Larus ridibundus* : A.U. 13179), marked on July 12th, 1910, by Mr. Lewis N. G. Ramsay, on the Sands of Forvie, Aberdeenshire, was killed near Bayon, Gironde, France, about January 18th, 1911, as reported by the Mayor of Bayon and by Mr. T. Ludovic. Several unimportant short-distance records have also been obtained for this species, including records of three birds out of fifty marked in 1910 at a colony near York, by Mr. H. R. Davidson, and recorded in the same autumn from Hull (2) and Newcastle respectively.

A Guillemot (*Uria troile* : A.U. 11230), one of a number of sea-fowl marked as young birds on the Dunbuy Rock, Cruden Bay, Aberdeenshire, on July 11th, 1910, by Mr. Lewis N. G. Ramsay and others, was shot on November 29th, 1910, at Marstrand, a dozen miles north of Gothenburg, Sweden, as reported by Dr. Jägerskiöld of Gothenburg Museum, where the bird is now preserved.

Turning now to the Passeres, we find that they make up the majority of the birds we have marked, but that they have afforded an extremely small proportion of "returns." In fact there are very few outstanding records.

A Song-Thrush (*Turdus musicus* : A.U. 14299), one of a brood of five marked in the nest on June 4th, 1910, at Skene House, Dunecht, Aberdeenshire, by Miss D. Hamilton, was shot on November 6th, 1910, at Leiria, Portugal, "by a party of hunters." Several Portuguese newspapers containing notice of the event were sent to me, and later I received the ring and full details from Mr. Ruy Ferreira.

We have a second long-distance record for a Passerine bird—in this case a Starling, and reported from farther north. This Starling (*Sturnus vulgaris* : A.U. 16480)

was an adult bird, netted, "ringed," and liberated at East Warriston, Edinburgh, on March 20th, 1911, by Mr. Archibald Campbell. On April 20th, 1911, it was obtained at Saltdalen, Norway, just above the Arctic Circle. We received the information from Mr. Anton Flemsæter, Saltdalen, and a newspaper cutting on the subject (number given wrongly as 16486) was sent by Dr. Thv. Heiberg, Christiania, to the Editor of the *Field*, and reached us through Mr. H. F. Witherby. The ring was afterwards returned to us by Mr. Flemsæter.

On June 29th, 1909, an adult Swallow (*Hirundo rustica*) was caught, "ringed" (A.U. 4498), and released at Hawarden Farm, Rusthall, Kent, by Mr. Ernest C. B. Parsons. On June 14th, 1910, it was re-caught by Mr. Parsons at the same farm.

Another bird of the same species (A.U. 7024) was marked in the nest at Wester Durris Farm, Durris, Aberdeenshire, on August 21st, 1910, by Mr. A. G. Davidson; on May 22nd, 1911, it was found with a broken wing by Mr. Duguid, at Darnford Farm, Durris, as reported by Mr. A. Macdonald. A considerable number of similar records for the Swallow and House-Martin already exist (*cf.* BRITISH BIRDS, Vol. III., pp. 299, 399; and *The British Bird Book*, Vol. II., p. 290).

But although Passerine birds afford few records of actual journeys, they give us many minor records. Thus birds caught in winter frequently turn up again in the same net, sometimes half-a-dozen times within a few months; such records will, undoubtedly, prove of value when classified. We have also a few records of birds being caught in a subsequent winter at the same place, although the absence of evidence as to any migration between times diminishes the value of these. Among our co-operators Mr. Archibald Campbell, Edinburgh, and Mr. Arthur G. Davidson, Old Aberdeen, have been particularly successful in this sort of work, the former with Greenfinches, Starlings, Robins, etc., the latter with Blue Tits, Robins, etc.

MAPPING MIGRATORY BIRDS.

BY

H. G. ALEXANDER.

My brother and I recorded our plan of mapping migratory species in their nesting areas in Volume II. (pp. 322-6) after only two years (1907 and 1908) of observation. In 1909 I was able to map the same part of the Tunbridge Wells district very thoroughly, but in 1910, and 1911, I have not been there enough to do such a large district with any thoroughness, and as I have been absent during the chief part of the song-period of a few species, it is difficult to give any figures that would really show the relative numbers from year to year. But as far as I can make out, the conclusion which we reached in 1909, after comparing that year with 1908, needs no modification: namely, that the numbers of a particular species hardly vary at all from year to year. As we pointed out in our previous article, the males inhabiting one small district seem to travel together, and sometimes none of these turn up one year; such a case as this is probably responsible for the frequent assertions, that a particular species is very scarce in one year; whilst on the other hand, if several new birds arrive elcse together and settle in a part which is not already occupied by the species, that may lead to the statement that a species is unusually common. But my own observations in a larger area, with every individual carefully noted from year to year, have forced me to the conclusion that the aggregate change from year to year is very slight.

This year (1911), however, there has been one notable exception, which I think should be recorded. This is in the case of the Chiffchaff (*Phylloscopus rufus*), and considering the wintry condition of the weather at the end of March and beginning of April, it is easy to account for it. As all the Chiffchaffs arrive in April, and as most continue to sing until the middle of July, I have been able to make about as sure of their presence this year

and last, as in 1908 and 1909. In the district most thoroughly worked, the following are the numbers of Chiffchaffs :—1908, 21 pairs ; 1909, 24 pairs ; 1910, 21 pairs ; 1911, 11 pairs. Compare this with the following figures in the same district (only 1910 strictly comparable to 1911 owing to my absence from home from about April 20th to June 20th in those years) :—White-throat [1908, 58 pairs ; 1909, 58 pairs ;] 1910, 25 pairs ; 1911, 34 pairs :—Lesser Whitethroat [1908, 16 pairs ; 1909, 14 pairs ;] 1910, 5 pairs ; 1911, 7 pairs :—Blackcap [1908, 12 pairs ; 1909, 12 pairs ;] 1910, 7 pairs ; 1911, 9 pairs :—Garden-Warbler [1908, 10 pairs ; 1909, 17 pairs ;] 1910, 2 pairs ; 1911, 4 pairs :—Willow-Wren [1908, 77 pairs ; 1909, 85 pairs ;] 1910, 57 pairs ; 1911, 44 pairs :—Tree-Pipit [1908, 38 pairs ; 1909, 34 pairs ;] 1910, 13 pairs ; 1911, 21 pairs :—Red-backed Shrike [1908, 4 pairs ; 1909, 4 pairs ;] 1910, 3 pairs ; 1911, 4 pairs. The numbers in 1908 and 1909 are in almost all cases very similar, and these are the most reliable figures. Possibly the snow in April had some effect on the number of Willow-Wrens observed in 1911, and I have reason to think it also had on the number of Wheatears that reached their nesting-places in some districts. Such Chiffchaffs as did come were later than usual in proportion to the migrants next to arrive. The only Chiffchaff that had arrived before the snow did not survive it, and I have not included it in the number for 1911.

There is a further point that I should like to mention. By now I have notes of quite a number of cases where birds have reappeared at a place after an absence of a year or two. In some cases it may be that one of the pair only came, and could not find a new mate one year but found one again the year after. But I feel little doubt that in the majority of cases the place is filled by a fresh pair, even though they may inhabit just the same area and sing from just the same points. One can often say with great certainty, for example, that

in some chalk-pit, with a lot of bushes, there must be a pair of Shrikes, or that in some park with a number of old trees, there must be Nuthatches. But this obviously does not mean that the same Nuthatches and Shrikes live there perpetually. Not long ago, for instance, all Nuthatches vanished from the Backs at Cambridge. The place is so ideal for them that I was sure some would soon turn up again there ; and within a year two new pairs had arrived. Now all this makes it seem extremely probable that it is not always the same pair of a migratory species that comes to a place, even when there has been no gap of a year. It is, in fact, clearly impossible to determine the longevity of birds by noting how many return year after year to the same spot.

NOTES

ALBINISTIC BLACKBIRD.

A BLACKBIRD (*Turdus merula*) of an unusual type was brought to me in northern Ayrshire on July 28th, 1911, in a very emaciated condition. The plumage was of a uniform light buff-colour with a ruddy tinge, the feathers being slightly darker at their tips than at their bases; the wings when spread approached a dark cream-colour; the beak was bone-colour, devoid of pigment; the legs very light with a pinkish tinge; the eyes a very dark pink, showing ruby-red in certain lights. The bird, which seemed about five or six weeks old, only survived a few hours.

R. OSWALD BLYTH.

[This bird was kindly sent to me by Mr. Blyth. The outer webs of the primaries were emarginated to the sixth, inclusive, proving it to be a Blackbird, but in size it was more like a Song-Thrush, the wing measuring only 112 mm. A paler median-streak was distinctly noticeable in some of the feathers of the upper-parts, showing that the bird was in its juvenile plumage. The eyes appeared to have no pigment at all. Unfortunately the organs were too decomposed to allow of their examination.—H.F.W.]

WHITE-SPOTTED BLUETHROAT IN SUSSEX.

MR. H. W. Ford-Lindsay records (*supra*, page 23) that a White-spotted Bluethroat (*Cyanecula wolfe*) was obtained at Pett, Sussex, on May 15th, 1911. I wish to record that another male was obtained at the same place (Pett Level) on May 17th, 1911.

J. B. NICHOLS.

MARSH-WARBLER BREEDING NUMEROUSLY IN WORCESTERSHIRE.

IN BRITISH BIRDS, Vol. III., page 157, you published a short account of my experience with the Marsh-Warbler (*Acrocephalus palustris*) in Worcestershire.

On June 9th, 1911, I paid a visit to the same place, with the intention of making a thorough search of the district, and gaining more knowledge of these interesting birds.

On the first day of my visit I heard but a few notes of one bird only, but I had no difficulty in recognizing the song as that of one of my old friends of two years before. Near

where the bird was singing I discovered a nest, but apparently it had been disturbed, and I was not able to make sure that it belonged to this bird, although I have little doubt that it did.

On June 10th, I heard three more Marsh-Warblers singing in various places, and discovered a nest with three eggs, from which I flushed the bird. It was very carefully concealed among the grass and coarse herbage growing along a lane.

On June 11th I heard six more birds singing (probably all paired) and discovered another nest. This nest was built along the side of a hedge-row dividing two fields of corn; and, like the one found on the previous day, was supported by several stems of meadow-sweet, and contained four eggs upon which the bird was sitting. Upon visiting it the next day I found no other egg had been laid, and apparently incubation had commenced.

On June 12th, I found a nest in a field of wheat, about seven yards from the hedge. It was supported by five stems of wheat, two of charlock and the leaf of a thistle. It contained three eggs upon which the bird was sitting—in fact, whenever I visited a nest I always found the bird sitting upon the eggs, whether the full clutch had been laid or not. Previous to watching the bird to this nest, I had made a thorough search among the nettles and cow-parsnip, a considerable quantity of which was growing in the immediate vicinity of the nest. I mention this fact as the birds appeared to select the wheat in preference to these plants.

On June 13th, I visited a field of beans in which two birds were singing vigorously on one of the previous days. I had long suspected that the birds nested among the beans and wheat, as they were very often heard singing in these crops, especially the beans. After a long search I discovered a partly-built nest. It was attached to and supported by several stems of the beans, and was more than twenty yards from any hedge.

On my way to the bean-field I heard another bird singing. This was the eleventh singing bird I had heard during my five days' visit to the district, and I had very little doubt but that all were paired, and either had nests or were building. On this date I again visited the nest in the wheat, and found that another egg had been laid.

The birds did not appear to be in colonies, as is so often the case with Reed-Warblers—in fact, the only two birds singing together were those in the beans.

There apparently is but one osier-bed in the district, which I visited. I also made a thorough search of it two years ago,

but could find no trace in it of either Marsh-, Reed-, or Sedge-Warblers; in fact on neither occasion did I meet with a single bird belonging to the two latter species in the whole of the district.

The sitting bird belonging to the nest in the wheat was exceedingly tame, and had to be almost driven off the nest each time I visited it, but this was not the case with the other birds, which quietly crept away from their nests as I approached. For fear of trespassing too much on your valuable space, I must omit any reference to song, except to say that it is exceedingly interesting and very melodious, and although, as has often been noticed by others, it appears to partake of many notes of various other songsters, even the "utick tic" of the Whinchat, in my opinion it is easily distinguishable from the song of any bird.

W. DAVIES.

INTRODUCTION OF BEARDED TITS IN YORKSHIRE.

WE have to record, with great regret, that Mr. W. H. St. Quintin has been at great pains to introduce Bearded Tits (*Panurus biarmicus*) at Hornsea Mere, East Yorkshire. In April, 1911, he liberated six pairs and two odd males, which he had obtained from Holland. Since then these birds have been seen in pairs, and on June 26th a brood was observed, while there may be other broods (*cf. Naturalist*, 1911, pp. 279-80). This passion for interfering with Nature possessed by aviculturists, is likely to do serious harm to the scientific study of ornithology, and is, in its way, almost as bad as the destruction of rare breeding-birds and their eggs by those afflicted with the "British-taken" mania.

In a number of occurrences reported from time to time in our pages, it has been impossible to say if the bird referred to was a genuine migrant or an escape from captivity, and this doubt as to a vagrant being a genuine wild bird or not, increases as more people keep birds in semi-captivity, without even a ring on their legs, or let them loose intentionally. There is the now notorious introduction of the Little Owl, which is increasing to such an extent as to be likely to become very harmful. Attempts to introduce the Willow-Grouse and the American Robin and other birds have, we hope, proved abortive; but this introduction of Bearded Tits from the Continent is nearly as bad as the attempt to introduce Willow-Grouse; and it can only be hoped that Mr. St. Quintin's aliens will be banished in some way or other.

As the Dutch birds are migratory and not sedentary like

ours, we trust these imported birds will follow their hereditary instincts, and that they will not return. THE EDITORS.

THE CONTINENTAL BLUE TIT AS A BRITISH BIRD.

AN example of the Continental Blue Tit (*Parus cæruleus cæruleus*) obtained in Peeblesshire some years ago, was exhibited by Mr. J. L. Bonhote at the June meeting of the British Ornithologists' Club (*Bull. B.O.C.*, Vol. XXVII., p. 101). This is, I believe, the first identified example of this form to be recorded for the British Isles. Mr. Bonhote does not state the date nor the locality, and one would not have expected to find the bird in an inland county. There can be little doubt, however, that it frequently occurs as a migrant on the east coast, immigrations of Blue Tits having been often noted, especially in Yorkshire. Here Mr. T. H. Nelson says (*Birds of Yorks.*, Vol. I., pp. 112-13) that they arrive in most seasons from mid-September to mid-November, and large immigrations were recorded in the last fortnight in October, 1878 (corresponding with a "rush" at Heligoland) in 1889, and in September, 1901, while in the autumn of 1910, Blue Tits were noticed amongst the immigrant Continental Great Tits by Dr. C. B. Ticehurst in Suffolk (*cf.* Vol. IV., p. 247).

H. F. WITHERBY.

THE NORTHERN AND THE CENTRAL-EUROPEAN CRESTED TITS AS BRITISH BIRDS.

THE following examples of Crested Tits have been recorded as having been obtained in England from time to time :
1. One shot near Stanpit Marsh, Christchurch, Hants., in 1846.
2. One obtained near Yarmouth, Isle of Wight (*Birds of Hants.*, p. 40). 3. One obtained at Whitby, Yorks., in March, 1872. 4. One taken to Mr. Robert Lee of Thirsk, many years ago : the Keighley example mentioned in Saunders's *Manual* is not authentic (*Birds of Yorks.*, p. 115). 5. One taken about 1840 in Suffolk. 6. One shot at Melton, Suffolk, about 1873 (*Birds of Suffolk*, pp. 251 and 63). A few other examples have been recorded as seen. There appears to be no Scotch-taken specimen of a Crested Tit, outside the birds' breeding area (Spey Valley), in existence, and the only likely record is that by Seebohm for Argyllshire (*cf. Fauna of Tay Basin*, etc., pp. 92-94, and footnote, p. 94). Of the specimens enumerated above, No. 1 is in Mr. Hart's collection at Christchurch, and I have not yet been able to examine it ; No. 4, Mr. R. Lee informs me, was obtained more than forty years

ago, and he does not know where the specimen is or who has it ; Nos. 5 and 6 I have been unable to trace ; Nos. 2 and 3 are the only ones I have examined, and the results are given below.

THE CENTRAL EUROPEAN CRESTED TIT.

Parus cristatus mitratus, Brehm.

THROUGH the kindness of Mr. P. W. Munn, I have been able to examine the specimen numbered 2 above. The history of this specimen, now in Mr. Munn's possession, is quite satisfactory, and it is the same as that mentioned by Bury in the *Zoologist* for 1844 (p. 639), so Mr. Munn informs me. The bird is an undoubted example of the Central-European form, *Parus cristatus mitratus*. This race, which breeds in central and western Europe south to the Pyrenees and Alps, differs markedly from the Scottish form (*P. c. scoticus*) and the Northern form (*P. c. cristatus*) by the buff-brown coloration of the upper-parts, and by the crest and cheeks being tinged with buff.

THE NORTHERN CRESTED TIT.

Parus cristatus cristatus, L.

THE specimen numbered 3 above is now in the Whitby Museum, and it has been sent to me for examination by the kindness of Mr. T. Newbitt, the curator. This bird is an old and much-worn specimen, but I think there is no doubt that it is an example of the Northern race *Parus c. cristatus*. This form breeds in Scandinavia, northern Russia, Poland, and eastern Germany. The upper-parts are brown with a greyish tinge, and the cheeks are white. The Scottish form is nearest to it, but is smaller and is darker on the upper-parts. In this specimen the wing, though much worn, measures 64 mm., the upper-parts are as grey-brown as any Scandinavian specimen, and there is but a mere tinge of buff on the flanks.

H. F. WITHERBY.

GREY WAGTAILS BREEDING IN SURREY.

WITH reference to Mr. Bunyard's interesting note on this subject in the June issue (p. 24), I may mention that a pair of Grey Wagtails (*Motacilla melanope*) nested in a certain locality in south-east Surrey in 1906, and have done so at the same place in each succeeding year, including the present.

I was told, by a competent observer, of a nest at Elstead in 1908, and have several subsequent records of the occurrence of the species in that neighbourhood in the nesting season.

During 1909-10-11, I have observed Grey Wagtails in several other localities in south-east Surrey, at dates which

certainly suggested that the birds were breeding, and I feel convinced that a thorough investigation would establish the fact that *M. melanope* nests annually in a number of suitable localities in the county. HOWARD BENTHAM.

SUPPOSED SOUTHERN GREY SHRIKE IN NORFOLK.

A CORRECTION.

IN our last issue (p. 75) I referred to the identification of a Grey Shrike shot at Drayton, Norfolk, in December, 1890, and recorded by Mr. J. H. Gurney as an example of *Lanius meridionalis* (cf. *Trans. Norf. and Norwich Nat. Soc.*, Vol. VIII., part III., pp. 352-3, and *B.B.*, Vol. I., p. 124) as being doubtfully correct. I have now, through the kindness of Mr. E. M. Connop, the owner of the specimen, been enabled to examine the bird, and find it to be an undoubted Great Grey Shrike (*Lanius excubitor excubitor*). The upper-parts are of a rather darker grey than is usual in specimens of this species, but they are not nearly so dark as those of *Lanius meridionalis*, while on the breast there is a tinge of pink, but nothing like the strong pink wash of the Southern Grey Shrike. Moreover, the wing of the bird in question measures 114 mm., while that of *L. meridionalis* very seldom reaches 110, and is usually from 102 to 105 mm. The Southern Grey Shrike also has a distinct white line on the lores and forehead, which is altogether absent in this specimen.

I have submitted the specimen to Dr. Hartert who entirely confirms my opinion, and tells me that there are equally dark, and even darker, examples of *Lanius excubitor* from England and western Germany in the Tring Museum. Dr. Hartert also states that a faint indication of pink on the breast is frequently found in not very old specimens of *Lanius excubitor*, but nothing to approach the pink of *L. meridionalis*.

The specimen recorded by Mr. Nichols from Sussex (*supra*, p. 75) is therefore the only authentic example of *Lanius meridionalis* obtained in this country. H. F. WITHERBY.

WOODCHAT SHRIKE IN SUSSEX.

ON July 24th, 1911, an example of the Woodchat Shrike (*Lanius pomeranus*) was obtained at Winchelsea, and examined by me on July 25th, while in the flesh. It was an adult male in fine condition. H. W. FORD-LINDSAY.

QUICK GROWTH OF A BROOD OF SWALLOWS.

ON August 1st, 1911, I found the nest of a Swallow (*H. rustica*) containing three eggs, and ten days later, on re-visiting the

nest, was surprised to find that it contained young, fully feathered and ready to fly--so much so, that I only managed to catch and "ring" one of the brood. H. W. ROBINSON.

[The fledging-period of the Swallow, as given by Mr. S. E. Brock, was 21-22 days (*cf.* Vol. IV., p. 29).—Eds.]

NORTHERN GREAT SPOTTED WOODPECKERS IN SUSSEX.

IN my *Birds of Kent* (p. 234) I suggested the possibility that the Great Spotted Woodpeckers that are occasionally seen in Thanet in autumn and winter, might prove to be migrant birds from the Continent, and I had hoped last winter to be able to settle the point. Mr. H. S. D. Byron, to whom I wrote, tells me that he saw a single bird there in October, but was unable to procure it.

The question therefore remains as it was, so far as Kent is concerned, but in the meantime I have been able to examine five Great Spotted Woodpeckers, which were shot during the last winter in east Sussex, and I find that one of these, a male, shot at Ninfield on November 24th, 1910, is a well-marked example of the Northern race (*Dendrocopus m. major*). The broad bill and pale under-parts are both well marked, when compared with examples of the British race, and the wing measures 141 mm., while the first primary exceeds the longest primary-coverts by 9 mm.

I have also recently heard that there is another specimen (an adult female) in the Tring Museum, which was procured at Brede on November 9th, 1903. N. F. TICEHURST.

FOOD OF YOUNG BARN-OWLS.

THIS summer I have had several chances of taking notes on the food of Barn-Owls (*Strix flammea*) at various nests. In one nest (in a tree) the food-supply for the two young Owls (about a fortnight old) consisted only of two young Starlings (*Sturnus vulgaris*), both decapitated, at my first visit. Two days later the larder consisted of fourteen young Starlings, all decapitated. So far there was no trace of fur at the nest. On this occasion the young birds were busy devouring the Starlings, which they did by starting at the wound made by decapitation and tearing the flesh away, leaving little but the tail- and wing-feathers. On my next visit, some ten days later, the nest contained the remains of about seventy victims, the majority whole; these were nearly all Starlings, but there were a few mice and rats, the latter not half grown. All the bodies were decapitated.

The food at a nest in a chicken-loft also consisted chiefly of Starlings. In this case, however, there was quite a ring of heads and pellets round the nest. The food-supply also occasionally included a frog. There was this curious point about the pellets: they were composed far more of fur than feather, although I never saw either mice or rats in the nest—this in spite of the fact that the farm was alive with rats. These pellets may have been those of the parent birds. I often took the young birds out to photograph them, and at times saw a pellet ejected. In these cases I always examined them carefully, and, to my great surprise, the first such pellet contained part of a skull of a half-grown rat. Later pellets contained the skulls of Starlings, and one, most of the skeleton (minus the head) of a Skylark, with the tail- and wing-feathers still adhering to it. The young birds were rather more than a month old, when I saw the first pellet thrown up. By clearing away the ring of heads and pellets round the nest at each visit, I was able to conclude that the old birds began to give the young the whole carcass at about the age of a month.

The large proportion of Starlings in the food found at these nests and in the pellets, seemed to me worth noting. I have watched the Owls take Starlings from fences in the twilight, and carry them into the nearest tree. J. H. OWEN.

NIGHT-HERON IN HAMPSHIRE.

EARLY in July, 1911, I was told of a Heron-like bird having been seen, since about the middle of May, at a small lake near New Milton, Hampshire. On July 14th I saw the bird, through the trees at first, and took it at once to be a Heron of small size, and afterwards, while it was flying round at varying heights, sometimes as near to me as twenty-five yards and for a period of five minutes, I felt sure I indentified it correctly as the Night-Heron (*Nycticorax griseus*). I felt further confirmed in my opinion by reference to the works of Lilford, Saunders, Seebohm, and Harting, and after a careful examination of the species in Hart's Museum, Christchurch.

The flight was very buoyant and noiseless, the broad wings flapping steadily, head carried back almost between the shoulders, and legs extended straight out beneath the tail. At times I used a glass in observing, but with difficulty, as the sunlight was so strong and the bird often too near me. I could not detect any trace of immature plumage, the underparts were very light grey, and as far as it was possible to

judge, the bird was fully adult. Only when it first rose from the bank, had I a chance of seeing the plumage of the upper-parts. This appeared uniformly grey, darker on the middle of the back, which points to the bird being a female: the greenish-black saddle mark on the male being very conspicuous. The size agreed well with the measurements given by Saunders.

Of course it is possible that this Heron might be an "escape," but I do not think so, as I know of nobody in this immediate neighbourhood likely to have Herons in captivity; besides this bird was in a fine state of plumage, and its flight was powerful and well sustained. I unfortunately did not hear the bird call, but my friend the Rev. R. Ll. Hodgson, who lives in a house in the wood adjoining the pond, several times heard it calling at dusk.

In the case of recording the occurrence of rare or uncommon visitors, nothing short of actually handling the bird is really satisfactory, still the information given above may be thought worthy of noting.

R. EDWARD COLES.

TUFTED DUCKS BREEDING IN BEDFORDSHIRE.

THE Tufted Duck (*Fuligula cristata*) bred this year (1911) by some private water in Bedfordshire. On June 7th we saw four drakes and one duck, but did not search for nests. On June 8th there were four drakes together and two pairs and a single duck on the water, and we flushed two ducks off their nests—one with nine and the other with twelve eggs. On June 22nd we flushed a duck from a third nest with eleven eggs. We did not make a thorough search, as we were anxious not to spoil the cover, but it seemed probable that six pairs were breeding.

There is every reason to believe that the Tufted Duck has bred in the same locality during the two previous years.

Mr. J. Steel Elliott, in his *Birds of Bedfordshire*, says that Mr. W. C. Thompson assured him the Tufted Duck bred at Luton Hoo Park in 1894, but the water-keeper could not confirm this, except that they remained there late on in the spring. Mr. Elliott adds that he saw some there on April 16th, 1895, but in May, 1896, and following years in the same month, he failed to find this species present.

There appears to be no other record of this duck having bred in Bedfordshire.

FRED. SHARMAN.

CASPIAN PLOVERS IN SUSSEX.

ON July 13th, 1911, a pair of Caspian Plovers (*Egialitis asiatica*) were shot on Romney Marsh; the male was in perfect plumage, but the female was somewhat worn. I examined both birds in the flesh on July 14th. H. W. FORD-LINDSAY.

RED-NECKED, NOT GREY, PHALAROPE
IN WARWICKSHIRE.

A CORRECTION.

It is with much regret that I have to state that I was in error in recording the Grey Phalarope from Warwickshire (*supra*, p. 26). Mr. T. Ground of Kenilworth has informed me that the bird in question is in his possession, and is an example of *P. hyperboreus* not *P. fulicarius*; I have been to see Mr. Ground, and have satisfied myself that he is quite correct; the age, sex, etc., hold good.

I am very sorry indeed that I should have been the means of introducing an error into the magazine.

A. GEOFFREY LEIGH.

BIRDS STRUCK BY LIGHTNING.—Mr. R. Fortune records (*Nat.*, 1911, p. 280) that on the night of June 25th-26th, 1911, a hen Pheasant and her ten young ones were killed by lightning in the middle of a field near Harrogate; and within 160 yards a Partridge, sitting upon a nestful of twenty newly-hatched chicks, was found to have been killed in the same way with all her chicks. Reproductions of photographs accompany the article. Some notes on the subject of birds being killed by lightning appeared in our first volume (pp. 29 and 62).

FLIGHT OF THE SWIFT.—Those of our readers who are particularly interested in questions of flight, should read an article in the *Field* (29, VII., 1911, page 314) by Mr. A. E. Crawley, who compares the structure and movements of the Swift to those of certain monoplanes.

ABNORMALLY LARGE CUCKOO'S EGG.—Mr. J. H. Owen, in the *Field* for July 22nd, 1911, records an exceptionally large infertile and double-yolked Cuckoo's egg, found near Felsted, Essex, in 1911. Although most birds occasionally lay double-yolked eggs, such specimens appear to be unusually rare in the case of the Cuckoo, and neither the Rey collection (913 eggs) nor that of Capek (245) contained any double-yolked specimens. Mr. Owen's egg measures

26·4 by 18·8 mm., while the largest eggs recorded by Rey measure 25·5 by 17·8 and 25 by 18·7 mm., so that it appears to be slightly larger than any previously recorded.—F.C.R.J.

LITTLE BITTERN IN BUCKINGHAMSHIRE.—Mr. A. Allen records in the *Field* (19/8/11, p. 474), that a male Little Bittern (*Ardeetta minuta*) was picked up under telegraph-wires near Olney, “a few weeks ago.”

THE MARKING SCHEME.

I shall be glad if all those who have “ringed birds” this season will now send in their schedules, so that the return of the numbers “ringed” may be made up. The schedules are also urgently required, for the reason that “recovered” birds are now being reported.

H.F.W.



LETTERS



CAN THE MALE INFLUENCE THE COLORATION OF EGGS ?

To the Editors of BRITISH BIRDS.

SIRS,—In noting (*supra*, p. 83) the occurrence of the interbreeding of Song-Thrush and Blackbird, it is stated that “Mr. Adamson considers that the male influences the colour of the egg-shell in such a case, but this seems impossible of belief.”

On page 199 of Newton’s *Dictionary of Birds*, 1893-96, it is stated : “A most important, but still unexplained, allegation is that eggs, containing hybrids, are not exactly like the eggs of the race or species of the female, but more or less resemble also the eggs of the race to which the fertilizing male belongs. Instances of such mongrel eggs are mentioned by Nathusius (*Zeitschrift f. Wissensch. Zoologie*, XVIII., page 299) ; and other well-authenticated instances would form valuable contributions to any of our scientific periodicals.”

In 1903 I was given an egg laid by a Canary hen (pure) when mated with a Goldfinch cock. This egg, which I still have, is more like that of a Goldfinch than that of a Canary. At the same time in my aviary here, I was mating Silver-Pheasant hens with Common Pheasant cocks, and the eggs laid by this cross were certainly somewhat darker in colour than those laid by pure Silver-Pheasants.

I regret that I cannot bring forward further evidence to corroborate Mr. Adamson’s opinion, but I think that a discussion on the question in the pages of your magazine would be most interesting.

HUGH S. GLADSTONE..

[That a male bird can influence the colour of the shell of the egg laid by the female to which it happens to be mated, seems to us a physiological impossibility. The well-known variability in the coloration of eggs makes it easy to understand how such a belief could have arisen. It seems to us that the cases cited by Mr. Gladstone can only be considered as “allegations” (to use Dr. Gadow’s word in the passage from Newton’s *Dictionary*) since he brings no evidence to show that the eggs he speaks of differed from those laid by these individual birds when mated to birds of their own species.—EDS.]

A CURIOUS UPSTROKE IN FLIGHT.

To the Editors of BRITISH BIRDS.

SIRS,—The accompanying photograph of a Pigeon may possibly be of interest to your readers. The wing is, apparently, being raised, for it is flexed at the wrist, whereas in the downstroke it is straightened at the wrist and elbow. But though the upstroke is in progress, the

flight-feathers are bent back, the bird apparently resisting the rush of air that would carry the wing backward and upward, or, possibly, even lowering the further part of the wing—a kind of continuation of the downstroke in which only the further half of the wing takes part. But, are the muscles required for such a stroke to be found? Professor



Marey in his *Vol des Oiseaux* (pp. 160, 268, and in the plate at the end) has figures which show the same astonishing phenomenon—they make it clear that it occurs during the upstroke—but, as far as I know, he nowhere makes any comment.

F. W. HEADLEY.



REVIEWS



Catalogue of Cases of Birds in the Dyke Road Museum, Brighton.

By E. T. Booth; with further notes by A. F. Griffith.
4th Edition, 1911.

IN Vol. III., pp. 294-5, we briefly noticed the supplement to the third edition of the Catalogue of this important local museum. Since then, further additions have been made to the collection, and a number of fresh cases having been prepared, entailing a certain amount of rearrangement, the time has no doubt arrived for a further edition of the Catalogue. This has been prepared under the able editorship of Mr. A. F. Griffith, in a manner uniform with its predecessors.

With the exception of one or two additional notes and the substitution of four fresh plates, the main portion of the Catalogue (200 pages) remains unaltered, as left by Mr. Booth; it is the remaining forty odd pages, therefore, that chiefly concern us here. In these will be found the additional specimens that have been acquired since 1893, with their histories and notes upon them from the pen of Mr. Griffith, who is to be congratulated on the careful and able manner in which he has traced out and put together the histories of these specimens, and more particularly those of the older ones from the Borrer, Monk, and Wilberforce collections, so that there remain very few whose complete authenticity is yet doubtful. The most important additions since the publication of the supplement, appear to be the American Bittern from Hollingbury Park, a Water-Pipit from Pevensey, a Yellow-browed Warbler and two Scarlet Grosbeaks from the Isle of May, a pair of Sociable Plovers from Winchelsea, and the Sooty Tern from Brighton, all of which have been already referred to in our pages. Besides these, there are a few that do not appear to have been previously recorded, viz :—

RICHARD'S PIPIT (*Anthus richardi*).—Two adults shot by the late Mr. Malcolm J. Wykeham-Martin at Aldrington Basins, Sussex, prior to December, 1889, and bequeathed by him to the collection in 1911.

AVOCET (*Recurvirostra avocetta*).—An adult male, from the Borrer collection, shot at Frensham Pond, Surrey, July 5th, 1846 (a second is said to have been shot with it).

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—Near Ashford, Kent, November, 1910.

ICELAND FALCON (*Falco islandus*).—Trapped by Alexander Murray, in April, 1888, at St. Feigus Sands, Banffshire.

NUTCRACKER (*Nucifraga c. caryocatactes*).—Penhurst (not Peshurst, as printed), near Ashburnham, Sussex, November 7th, 1908.

GULL-BILLED TERN (*Sterna anglica*).—Shot by the late Mr. M. F. Wykeham-Martin in Romney Marsh, Kent, on September 12th, 1862.

Besides these, certain important corrections must be noted :—

WILLOW-TIT (*Parus atricapillus kleinschmidti*).—It is pointed out (p. 186) that one of the birds in Booth's case of Marsh-Tits, obtained near Plumpton in March, 1866, belongs to this species.

SCANDINAVIAN ROCK-PIPIT (*Anthus spinoletta littoralis*).—The two specimens hitherto recorded as Water-Pipits (*A. s. spinoletta*) in the Borrer collection, and obtained at Shoreham in August, 1868, and on March 9th, 1869, belong to this race.

MEADOW-PIPIT (*Anthus pratensis*).—The bird, obtained at Brighton on March 13th, 1884, and recorded as a Red-throated Pipit (*A. cervinus*) is now catalogued under its correct name (*cf.* Vol. II., p. 278).

BROWN-BACKED WARBLER (*Aëdon galactotes syriaca*).—The Rufous Warbler, shot at Ninfield, May 18th, 1910, is also now catalogued under its correct name (*cf.* Vol. IV., p. 310).

NUTCRACKER (*Nucifraga caryocatactes macrorhynchus*).—The original Sussex specimen recorded and figured by Borrer (*Birds of Sussex*, p. 156), shot at Littlington, September 26th, 1844, has been found to belong to the thin-billed Siberian race.

It remains to notice a fault which we hope may be corrected in all subsequent editions of the Catalogue, as it is one which cannot fail to detract from the value of the excellent work it contains. We refer to the almost total absence throughout of the scientific names of the species dealt with. No doubt they were omitted from the original edition, but since other notes have since been added, the addition of the scientific names can in nowise interfere with Booth's own notes, and while adding to the usefulness of the Catalogue to the scientific worker, it can make no difference to the ordinary visitor, for whom, no doubt, the catalogue is primarily intended. N.F.T.



SLENDER-BILLED CURLEW, *Numenius tenuirostris* Vieill.

Male, shot on Romney Marsh, Kent, September 21st, 1910.

BRITISH BIRDS

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ASSISTED BY

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THE SLENDER-BILLED CURLEW,

Numenius tenuirostris Vieill.

A NEW BRITISH BIRD.

BY

M. J. NICOLL.

TOWARDS the end of September, 1910, a small flock of Slender-billed Curlews—*Numenius tenuirostris*—arrived on Romney Marsh, near Brookland, Kent, and of these three were shot. The first two—an immature pair—were obtained on September 21st, and the male was shown to me in the flesh the same day.

Two days later a somewhat worn adult male was shot, and this also I examined before it was skinned. The first two of these are now in the collection of Mr. J. B. Nichols, the male of which is, by his kind permission, here figured.

That the Slender-billed Curlew should occur on our coasts is not surprising, seeing that so long ago as 1830, or thereabouts, one was shot as close as Heligoland, while it has occurred, so I am informed, three times in Holland, twice in Belgium, once at least in northern France, and four times in Germany.

It winters in the countries bordering the Mediterranean, and was for a long time thought to breed there, but there now seems to be no doubt that it breeds in western Siberia. Mr. H. E. Dresser exhibited the first authenticated egg at the British Ornithologists' Club in December, 1909, and announced that Russian correspondents of his had taken eggs on the borders of Lake Tschany near Taganowskiye, and in the Tara District in the south-eastern part of the Tobolsk Government, Siberia, in 1909 (*Bull. B.O.C.*, XXV., pp. 38-39).

This species is easily recognizable by its short and very slender bill, and by the pear-shaped black markings on the flanks. In size it nearly approaches the Whimbrel, but differs from it in the coloration of the crown, which is streaked with buff and black, like the Common Curlew.

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TOLD IN PHOTOGRAPHS



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ON THE ENGLISH AND OTHER GREEN WOODPECKERS.

BY
ERNST HARTERT.

WHILE studying the Green Woodpeckers in connexion with my work on the palæarctic birds, I found that not less than five forms must be distinguished within Europe alone.

The name *Picus viridis viridis* L. must be restricted to the birds from Scandinavia, the greater part of Russia, and north-eastern Germany (east Prussia).

Central European birds differ from the northern form in having shorter bills and shorter wings, and being generally smaller; the oldest name for this form is *Picus viridis pinetorum* (Brehm.) As the various forms have not hitherto been distinguished, the exact distribution of this form cannot be stated.

English Green Woodpeckers are, as might have been presumed, nearest to the Central European form, but the wings are still shorter, those of thirteen males measuring 157—161, those of twelve females 158—163, against 162—167.5 mm. in *P. v. pinetorum*. Moreover the bill is shorter, but not slenderer, so that it appears to be rather stronger and more stumpy. The English form requires therefore a new name, and I propose to call it:

PICUS VIRIDIS PLUVIUS, subsp. nov.,

because of the well-known ancient superstition that its call is a sign of approaching rain.

Type: ♂ ad., no. 2946, Tring Museum, 28.4.1903, Ninfield, Sussex. Collector: Mr. W. Ruskin Butterfield.

Italian Green Woodpeckers have the same measurements as the English ones, but the beak is considerably slenderer; wings about 156—161 mm. I name this form:

PICUS VIRIDIS PRONUS, subsp. nov.,

Type ♂ ad., 20.1.1902, Firenzola, near Florence.
Specimens from Greece are evidently inseparable from Italian ones.

The fifth European form is *Picus viridis sharpei*, from Spain, the differences of which have been sufficiently described by Saunders, Hargitt, Dresser, and others.

NOTES

RECOVERY OF MARKED BIRDS.

BLACKBIRDS (*Turdus merula*).—B.B., No. 2053, marked by Mr. R. O. Blyth at Skelmorlie, Ayrshire, on June 24th, 1909, as a young bird. Recovered same place about June 18th, 1911.

B.B., No. 2046, marked as above, on July 17th, 1909, as an adult male. Recovered in same garden on July 16th, 1911. Ring replaced and bird released.

REDBREAST (*Erithacus rubecula*).—B.B., No. 5694, marked by Mr. H. W. Ford-Lindsay at Pett, Sussex, on May 1st, 1910, as a nestling. Recovered at same place on August 19th, 1911. Reported by Messrs. Stephen Bros.

GREAT TIT (*Parus major*).—B.B., No. 39, marked by Mr. N. H. Joy at Bradfield, Berkshire, on January 8th, 1911, as an adult. Recovered at same place on July 24th, 1911.

MEADOW-PIPIT (*Anthus pratensis*).—B.B., No. 5329, marked by Mr. R. O. Blyth at Goathland, Yorkshire, on June 22nd, 1910, as a nestling. Recovered at same place end of May, 1911. Reported by Mr. C. Peckett, per Mr. W. D. Patterson.

ROOK (*Corvus frugilegus*).—B.B., No. 21670, marked by Mr. A. G. Leigh at Hampton-in-Arden, Warwickshire, on April 29th, 1911, as a nestling. Recovered at Marston Green, near Birmingham, on August 26th, 1911. Reported by Mr. H. N. Allday.

BARN-OWL (*Strix flammea*).—B.B., No. 8, marked by Mr. N. H. Joy, at Bradfield, Berkshire, on July 14th, 1910, as a nestling. Recovered at Highclere, Newbury, Berkshire, on July 4th, 1911. Reported by Mr. J. A. Rutherford.

MERLIN (*Falco aesalon*).—B.B., No. 22423, marked by Mr. W. T. Blackwood near Peebles, on July 8th, 1911, as a nestling. Recovered at St. Mary's Loch, Selkirk, on August 25th, 1911. Reported by Mr. F. H. Dickenson.

MALLARD (*Anas boscas*).—B.B., No. 9147, marked by Mr. T. Hepburn at Old Hall Marshes, Tollesbury, Essex, on May 26th, 1910. The bird was hatched-out under a domestic fowl from an egg picked up on the marshes. Recovered at Elbing, Danzig, west Prussia, on August 16th, 1911. Reported by Mr. A. Bohm.

REDSHANK (*Totanus calidris*).—B.B., No. 12448, marked by Mr. R. O. Blyth at Skelmorlie, Ayrshire, on May 29th, 1911, as a nestling. Recovered at Millport, Isle of Cumbrae, Buteshire, on July 11th, 1911. Reported by Dr. J. MacRury.

COMMON CURLEW (*Numenius arquata*).—B.B., No. 22318, marked by Mr. R. E. Knowles on the East Cheshire Hills, on June 18th, 1911, as a nestling. Recovered at Sealand, Cheshire, on August 18th, 1911. Reported by the *Chester Chronicle*.

COMMON TERNS (*Sterna fluviatilis*).—B.B., Nos. 21084, 21108, and 21129, marked by Mr. H. W. Robinson at Ravenglass, Cumberland, on July 22nd and 24th, 1911, as nestlings. Recovered at Flookburgh on the north coast of Morecambe Bay, Lancashire, about August 28th, 1911. Reported by Mr. H. B. Turney.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 23905, marked by F. W. Smalley at Ravenglass, Cumberland, on June 12th, 1911, as a nestling. Recovered at Toddell, Cockermouth, Cumberland, on July 14th, 1911. Reported by Mr. W. F. Dixon.

B.B. No., 23760, marked as 23905 on June 12th, 1911. Recovered near Skipton, Yorkshire, on September 1st, 1911. Reported by Major R. Tempest.

B.B., No. 23842, marked by Mr. H. W. Robinson at Ravenglass, Cumberland, on June 12th, 1911, as a nestling. Recovered at Lytham, Lancashire, on July 16th, 1911. Reported by Mr. S. Westermann.

B.B., No. 23539, marked as 23842 on June 11th, 1911. Recovered at Selkirk on July 17th, 1911. Reported by Miss N. Melrose.

B.B., No. 24145, marked as 23842 on June 16th, 1911. Recovered on north shore of Morecambe Bay, five miles from Ulverston, Lancashire. Reported by Mr. H. B. Turney.

B.B., No. 24412, marked as 23842 on June 19th, 1911. Recovered near Keighley, Yorkshire, on August 26th, 1911. Reported by Mr. H. Phillipson.

B.B., No. 31355, marked as 23842 on June 12th, 1911. Recovered at Stretford, Lancashire, on August 8th, 1911. Reported by Mr. E. Griffiths.

B.B., No. 23457, marked as 23842 on June 10th, 1911. Recovered near Cockermouth, Cumberland, on July 16th, 1911. Reported by Mr. John Wilson.

B.B., No. 23583, marked as 23842, on June 12th, 1911. Recovered on the River Usk, near Newport, Monmouthshire, on September 8th, 1911. Reported by Mr. A. Rogers.

B.B., No. 23656, marked as 23842 on June 12th, 1911. Recovered on the River Tyne near Newcastle, Northumberland, on September 8th, 1911.

B.B., No. 22767, marked by Mr. John Murray at Dhu Loch, Penpont, Dumfriesshire, on June 28th, 1911, as a nestling. Recovered on the Water of Ae, Amisfield, Dumfriesshire, on July 20th, 1911. Reported by Mr. J. Stewart Lyon.

B.B., No. 22754, marked as 22767. Recovered in Troqueer parish, three miles from Dumfries, on July 17th, 1911. Reported by Mr. J. Service.

B.B., No. 22959, marked by Mr. J. S. T. Walton at Denton Fell, Cumberland, on June 11th, 1911, as a nestling. Recovered at Dornock, near Arran, on July 25th, 1911. Reported by Mr. J. T. M'Glasson.

COMMON GULL (*Larus canus*).—B.B., No. 21918, marked by Mr. W. I. Beaumont at Stirk Island in the Lynn of Lorn, Argyllshire, on June 16th, 1911, as a nestling. Recovered at Loch Etive, near Connel Ferry, Argyllshire, on August 23rd, 1911. Reported by Miss K. Macgregor.

B.B., No. 31981, marked as 21918 on July 12th, 1910. Recovered at Onich, six miles south of Fort William, Inverness-shire, on September 6th, 1911. Reported by Mr. W. Hay.

HERRING-GULL (*Larus argentatus*)—B.B., No. 32048, marked by Miss A. C. Jackson at Cromarty Firth, Ross-shire, on July 8th, 1911, as a nestling. Recovered at Torry, near Aberdeen, on September 6th, 1911. Reported by Mr. James Mackie.

LESSER BLACK-BACKED GULL (*Larus fuscus*).—B.B., No. 31383, marked by Mr. H. W. Robinson at Foulshaw, Westmorland, on July 1st, 1911, as a nestling. Recovered at Deptford, Sunderland, Durham, on August 29th, 1911. Reported by Mr. T. Teal.

RECOVERY OF MARKED STARLINGS.

BETWEEN January 12th and February 14th this year I caught in cage-traps and "ringed" 568 Starlings (*Sturnus vulgaris*). Six of them were shot in the close neighbourhood in March. Since the beginning of the breeding season, May 1st, nine

have been recovered within a mile of the place where they were "ringed," three in the same cage-trap; two were shot from the nest. Besides these, one of each of two pairs nesting close by had a ring on its leg. This suggests that at any rate a certain proportion of Starlings seen here in the winter are strictly non-migratory, although some are no doubt winter immigrants (*cf.* Vol. IV., p. 335, No. C234).

Record of Starlings "ringed" and recovered at Bradfield, Berkshire:—

No.	"Ringed," 1911.	Recovered, 1911.
11406	January 12	Shot about March 20.
11524	" 12	" " " "
12136	February 6	" " " "
2393	January 13	Shot about March 25.
C204	February 1	" " " "
C95	January 24	" " " "
12001	" 29	May 1, at nest.
12031	" 31	" " " "
7505	" 15	Recently killed, May 8.
12064	" 30	Cage-trap, June 17.
11879	" 22	" " " "
C136	" 24	" June 18
11237	" 28	Shot July 7.
29	" 22	" about July 23.
12105	February 12	" " " "

Besides these, Starlings and Rooks were constantly re-captured within a day or two in the cage-trap.

————— NORMAN H. JOY.

SINCE the appearance of my article on the recovery of Aberdeen University marked birds (*antea*, p. 98), many other records have come to hand, including several of considerable importance. Of these I wish to give details of one which is of particular interest, and which is very similar to one already quoted (pp. 101-102). A Starling (*Sturnus vulgaris*: A.U. 8536) was netted, marked, and released by Mr. L. N. G. Ramsay, at 11, College Bounds, Old Aberdeen, on January 20th, 1910; it was killed by a bird-of-prey near Kvarv I Salten, Norway (circa 67° N. lat.), about August 20th, 1911, the ring being found by a boy and brought to our informant, Mr. Nils Lie, schoolmaster of that place; time, one year seven months. The comparative proximity of the localities at which the two Starlings were recovered is rather remarkable.

Corrigenda: I take this opportunity of noting the following corrections in the article referred to: On p. 99, third column

of table, for "Michaelstown" read "Mitchelstown"; on p. 102, line 18, for "Aberdeenshire" read "Kincardineshire."

A. LANDSBOROUGH THOMSON.

A MARKED ARCTIC TERN.

A YOUNG Arctic Tern (*Sterna macrura*), bearing a ring stamped "Vogelwarte Rossitten 2342," was picked up at Kellington, near Pontefract, Yorkshire, on August 20th, 1911, and sent to me by Major W. B. Arundel.

Dr. H. Weigold informs me that he "ringed" this bird when a nestling on the island of Sylt (Schleswig-Holstein), on June 27th, 1911.

H.F.W.

FIELDFARES SWALLOWING *FÆCES* OF THEIR YOUNG.

DURING a recent visit to Norway, I had excellent opportunities of studying a pair of Fieldfares (*Turdus pilaris*) at the nest, and whilst in hiding for several hours, I repeatedly saw both male and female swallow the *fæces* of their young. This was usually accomplished immediately after the process of feeding, but several times the act of swallowing was performed during intervals between feeding the chicks, and often when the bird still retained a considerable quantity of food in the bill.

On two occasions I observed the female swallow several small pieces of dry grass, which she took from the bottom of the nest, and which presumably had become fouled.

The accompanying photograph, although not illustrating the above-mentioned facts, will perhaps be of interest as, so far as I am aware, nothing of a similar nature has previously been published.

HOWARD BENTHAM.

ROCK-THRUSH IN SUSSEX.

ON September 1st, 1911, a specimen of the Rock-Thrush (*Monticola saxatilis*) was shot at Pett, Sussex. Another was obtained on September 2nd at the same place. I examined them in the flesh, and found they were both young birds.

Upon dissection, one proved to be a cock and the other a hen. This is the first record for Sussex, and I believe the first occasion this species has been obtained in the British Isles on the autumn migration.

H. W. FORD-LINDSAY.

[Saunders (*Manual*, p. 17) only admitted the authenticity of one specimen, shot in Hertfordshire on May 19th, 1843; but more recently an adult male was caught at the Pentland Skerries, Orkneys, on May 17th, 1910, and another seen there on the same day (*Ann. Scot. Nat. Hist.*, 1910, p. 148; 1911,

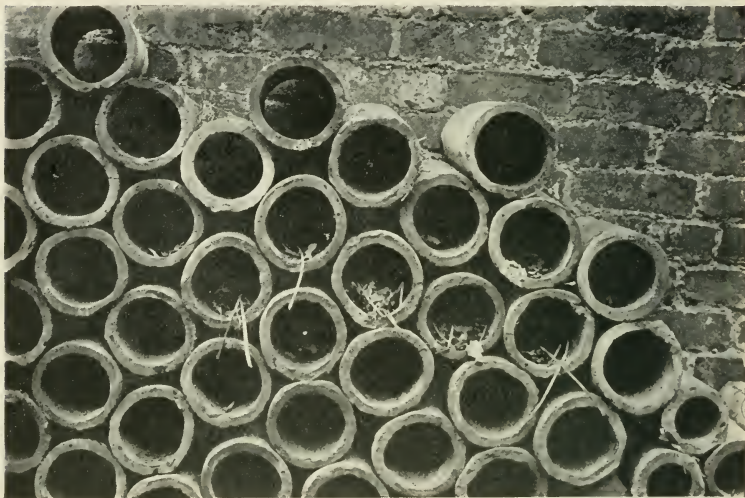


FIELDFARE AT NEST.
(*Photographed by Howard Benthams.*)

p. 135; *cf. antea*, IV., p. 11). The above record is of extreme interest, as showing that Great Britain is occasionally visited by immature birds in autumn as well as by adults in spring.—EDS.]

A PAIR OF ROBINS BUILDING MANY NESTS.

DURING April, 1911, a pair of Robins (*Erithacus rubecula*) made a nest in one of a stack of pipes near Oswestry. When the nest was nearly completed and partly lined, for some reason, possibly lack of space, they left off and began to build in the next pipe. Here again, after the nest had been nearly completed, the same thing happened. One after another the pipes were tried, until twenty-three nests had



NESTS OF ONE PAIR OF ROBINS.

(Photographed by J. H. Owen.)

been started, and then the birds decided to go and build elsewhere. In a photograph, taken at the time, eleven of the nests show to a limited extent; the other nests were not nearly so complete.

J. H. OWEN.

BARRED WARBLER IN LINCOLNSHIRE.

ON September 2nd, 1911, I caught an immature Barred Warbler (*Sylvia nisoria*) at Cleethorpes, in one of my trap-cages; there was a light east wind at the time.

The bird is caged and still in my possession. W. E. SUGGITT.

BRITISH WILLOW-TIT IN LANARKSHIRE.

ON August 30th, 1911, I secured a black-headed Tit, and on submitting it to Mr. Witherby he at once pronounced it to be a Willow-Tit. It was a young bird, but had almost completed its first winter's plumage, and was quite a typical specimen of *Parus atricapillus kleinschmidti*.

In the valley of the Calder, a Clyde tributary in the Blantyre district, where it was secured, I have always known a few pairs to nest; but until February last, when notes by Mr. Wilson on its appearance in Renfrewshire, by the Duchess of Bedford on its appearance in Kirkeudbrightshire, and an editorial note (Vol. IV., p. 284) were published, I had not given these birds close observation.

During part of December and January last I had often seen a number of these Tits, which I took to be first year's Marsh-Tits. They were browner than the summer birds, and had not the buff flanks. After reading the above-mentioned notes I determined to secure one, but found they had completely vanished. However, about the middle of March the nesting contingent of these birds arrived, and I have since kept them under pretty close observation.

For some years a pair nested in the root of a decayed tree-stump, but this spring the site was claimed by a pair of Great Tits, and although I visited this nest frequently, and marked one of the adults and five young ones, I entirely overlooked a Willow-Tit's nest in a hollow alder, not fifteen yards away. The half dozen young left the nest during the second week of July, and another family which I think were reared in a large decayed willow, also took wing at this time. A third pair built under the exposed roots of an alder growing on the river-bank, and they also were successful in rearing young.

Just now the families of Willow-Tits feed mostly amongst the leafy tree-tops, where the old bird's call is frequently heard; but by waiting patiently the observer is sometimes rewarded by seeing them come down amongst the bushes and lower branches.

WALTER STEWART.

UNUSUAL NESTING-SITE OF THE GREY
WAGTAIL.

As is well known, the nest of the Grey Wagtail (*Motacilla melanope*) is usually placed in the immediate neighbourhood of running water, in most cases in steep banks or walls bordering on streams. In North Wales I have known one or two cases of nests built in steep rock-faces some little distance

from water, but was much surprised this year to find a pair breeding in a sandstone cliff by the side of a high road in the Ashburne district, Derbyshire. A tiny rivulet with low banks crosses the road 135 yards away, but the nearest stream of any size is about a quarter of a mile distant across the fields, and the parent birds resorted regularly to it for food, occasionally picking up flies from the road and flying up with them to the nest. In spite of the exposed position of the nest, the young were hatched off safely.

F. C. R. JOURDAIN.

PIED FLYCATCHERS BREEDING IN DEVONSHIRE.

As the fact is not generally known, and I know of no publication recording the actual breeding of Pied Flycatchers (*Muscicapa atricapilla*) in Devonshire, it must be of interest to record its nesting in the Culmstock district. In the beginning of July, 1911, I saw two lots of Pied Flycatchers—five in one lot and four in the other (two and three young respectively)—and I have no doubt they were locally bred. The last nest I actually found was in 1907, situated in a hole in an old cob-wall, forming part of the outbuildings of a farm, about one mile from the Somerset border. It was within 100 yards of this spot that I saw the five birds this year. My brother informs me that he also found a nest in the same cob-wall a few years ago.

The Pied Flycatcher used also to breed regularly in the Tiverton district. First one pair, and afterwards for some years two pairs, were found breeding. This year it has bred close to Templeton Rectory, about five miles from Tiverton; I am informed by the Rev. J. Fowler that both it and the Spotted Flycatcher have done so for some years.

Pied Flycatchers are very interesting birds to watch, as they become very quickly accustomed to one's presence near the nest, and will feed their young within a few feet of the watcher. They are also very methodical in their actions, first feeding the young, then coming to the edge of the nesting-hole for a second or two, when they re-enter and remove any excrement there may be in the nest. The cock bird is also quite one of the sharpest of birds, both in sighting an enemy, and afterwards in persistently following him up, and letting other birds know of the danger. I have seen one follow up a cat over both open ground and wood for more than 300 yards from the nest, giving the angry alarm-note the whole way. Amongst the food taken by these birds I have noticed "daddy-long-legs" (*Tipula*) and butterflies. The small pearl-

bordered fritillary (*Argynnis selene*) seems a favourite, and I once saw a large hatch of these on a common close to a nest of Pied Flycatchers, which were feeding greedily upon them: the young apparently swallowed wings and all.

CHARLES COLLIER.

NUMBERS OF YOUNG IN BROODS OF SWALLOWS AND HOUSE-MARTINS IN 1911.

IN Vol. IV. (p. 249) I mentioned the size of broods of Swallows (*Hirundo rustica*) and House-Martins (*Chelidon urbica*) which I had visited during the summer of 1910, showing that full broods were the exception, both in that year and the one previous, in the neighbourhood of Lancaster.

With regard to Swallows, the remarkably dry summer of 1911 has been a splendid one for them, large broods being much more general, and in no case were dead found in the nests. Of nineteen Swallows' nests visited in June, two contained broods of six, ten of five, five of four, and two of three. Of twelve nests visited in July, three contained broods of five, eight of four, and only one of three. Twenty-seven nests were visited during August, of which one contained six young, ten had five each, thirteen had four apiece, and three contained broods of three, whilst two nests visited in September contained four and five respectively.

1911:	Of 60 nests,	3 had broods of 6,	and 24 of 5 = 45 %, average
			[brood being 4.4.
1910:	„ 45 „	none	15 of 5 = 33 %, average
			[brood being 3.89.
1909:	„ 11 „	none	none = 0 %, average
			[brood being 3.27.

Good as 1911 has been for Swallow broods, it did not benefit those of House-Martins at all, for I again failed to find a full brood, as was also the case of 1909 and 1910. The average brood this year was 3.22, as compared with 3.25 in 1910, and only 2.25 in 1909. H. W. ROBINSON.

QUICK GROWTH OF A BROOD OF SWALLOWS AND A POSSIBLE CAUSE.

MR. J. H. OWEN informs me (*in litt.*, September 16th, 1911) that he watched the growth of a brood of young Swallows (*Hirundo rustica*) which were hatched on August 15th, 1911. They did not leave the nest till September 7th, which gives a fledging-period of twenty-three days; in 1910 the young flew from nests watched on the twenty-first day. These observations agree closely with those of Mr. S. E. Brock

and myself, and seem to show that the instance recorded by Mr. Robinson is quite abnormal in this country, and due to some exceptional cause. It is interesting, however, to note that Naumann, who must have had plenty of opportunities for observation on this point, states that the young leave the nest in about two weeks.

F. C. R. JOURDAIN.

In the *Field* for September 23rd, 1911 (p. 709), Mr. H. Gandy states that his loader, J. Lowis, of Greengil Farm, Barnard Castle, noticed no fewer than eight old House-Martins (*Chelidon urbica*) engaged in feeding the four young which still remained in a nest over the porch of his farm on September 2nd. There seems to be no doubt in this case as to the number of birds engaged in the work, as the old birds sometimes were seen sitting in a row with food, and as soon as one had fed the young another took its place. As the House-Martin seldom rears more than four young, or five at the outside, they can hardly have been the young of a previous brood. About a fortnight ago, Mr. J. Henderson mentioned to me that several House-Martins were feeding the young in a nest on his outbuildings at Clifton, Derbyshire, so that possibly this habit is not unusual in the case of late broods, and may conduce to their more rapid development. I have myself on two occasions seen three Swallows in attendance on one nest.

ROLLER IN DEVONSHIRE.

I WENT down to Dartmoor on August 3rd, 1911, and stayed not far from Chagford in a house close to the moor, 1,200 feet above sea level. For four days after I arrived there a Roller (*Coracias garrulus*) frequented some rough fields adjoining the moor. It was not at all wild, and if a little caution were exercised it could be approached within fifteen or twenty yards. It was, I think, a young bird, as there was very little blue on the head or breast. It evidently moved on elsewhere about August 7th, as I never saw it after that date, and could not hear that any such bird had been shot.

ARTHUR BANKES.

YOUNG CUCKOO IN THE NEST OF A BULLFINCH.

ON July 8th, 1911, a keeper offered to show me a young Cuckoo (*Cuculus canorus*). To my great surprise it was in the nest of a Bullfinch (*Pyrrhula europæa*). He had found it the previous day by hearing it "bawling." The bird was very nearly ready to leave the nest, but was very thin

and in poor condition, and it seemed as though the diet supplied by the Bullfinch had been barely sufficient (or suitable) to rear it.

J. H. OWEN.

YOUNG GREAT SPOTTED WOODPECKERS.

ON June 24th, 1911, I found a nest of the Great Spotted Woodpecker (*Dendrocopus major*) still containing two fully-fledged young. The nest was in a small tree in the middle of



YOUNG GREAT SPOTTED WOODPECKERS.

(Photographed by J. H. Owen.)

a thick wood in Essex, and fifteen to twenty feet from the ground, in an old boring. I examined the nest with the help of the boy who was with me. It was in a horrible mess, as all the excrement, which is left in the hole, was very wet and full of large white maggots. The nests of Green Woodpeckers which I have opened this year, as soon as the young had gone, have all been in a similar condition. We took the two young out of the nest and put them upon an old stump, up which they climbed with their feet wide apart and their tails applied to the trunk. Arrived at the top they pecked at one another and uttered their call-note. Occasionally they would fly

off to climb up my coat, and once or twice one of them, on reaching my shoulder, gave my ear a sharp peck. After watching their amusing movements for some time and photographing them, we replaced them in the nesting-hole.

J. H. OWEN.

PROBABLE BREEDING OF THE LITTLE OWL IN BERKSHIRE.

IN the early summer of 1910, when walking round a gorse-covert in the neighbourhood of Windsor, I flushed a Little Owl (*Athene noctua*) out of a bare ditch, the bank of which was full of rabbit-holes. It flew up into a tree and began calling, and was answered by another bird. They both seemed very anxious, and thinking they had young close at hand, I walked along the bottom of the ditch. Out of this I put up four more. They could fly, but were obviously young birds. I am sure they were hatched in the neighbourhood, but could never find the nest. They were seen several times afterwards near the same place.

In 1911 I was away in Egypt, but was told that another family party had been seen.

B. VAN DE WEYER.

[Both in England and on the Continent the Little Owl not infrequently nests in rabbit-burrows.—F.C.R.J.]

EXTERMINATION OF THE SEA-EAGLE IN IRELAND.

IN the *Zoologist*, 1911 (p. 346), Mr. R. Warren records the disappearance of the Sea-Eagles (*Haliaeetus albicilla*) from their last breeding haunts in Ireland, on the cliffs of north Mayo. They have been destroyed by the keepers of the adjacent grouse-shootings, and at the present time the only relics of their former presence are the old nests, which are still visible at several places along the cliffs. Mr. Warren mentions one on the great cliff of Loughmuriga, another on Alt More, and three on the great cliff of Alt Redmond, besides one on Spinks: the five last named being situated on the range of cliffs between Porturlin and Portacloy. On July 1st, 1892, Mr. Warren was fortunate enough to see one of these Eagles with a hare in its talons, pursued by an angry Peregrine, and in all probability on its way to the nest. During the two following years the Eagles were reported to be present as usual on the cliffs, but no one seems to have seen an occupied nest. In May, 1898, in company with Messrs. Ussher and Howard Saunders, evidence of the presence of these birds was found in the shape of an eagle's feather, and the skeleton

of a hare which must have been killed within a week or two. In August of the present year Messrs. Warren and Barrington revisited the north Mayo coast and rowed along the base of the cliffs, but could find no traces of the Eagles, while the boatmen all agreed that it was some years since any had been observed in their old haunts.

The disappearance of this fine species from the Irish fauna is a national loss, and is the more to be regretted as the breeding stock in Scotland is now reduced to a very low ebb, so that any untoward accident to the few surviving pairs will mean the extinction of this species in the British Isles. Mr. Warren is of opinion that the Golden Eagle (*Aquila chrysaëtus*) is in Ireland on the verge of extermination, being reduced to a single pair, and states that the eyrie on Muilrea is now unoccupied, the last bird having been poisoned in the spring of 1910. Possibly in this case the number of surviving birds may be under-estimated.

F. C. R. JOURDAIN.

SNOW-GEESSE IN ESSEX.

IN a recent issue of BRITISH BIRDS (*antea*, p. 25), I gave some particulars supplied to me by Major Thornhill regarding supposed Snow-Geese (*Chen hyperboreus*) seen by him in Essex this summer. Mr. A. W. Craig, Rettendon Hall, Wickford, has since given me the following further information. On May 11th, 1911, he saw two Snow-Geese on a strictly preserved marsh near Wickford—getting within thirty-five yards of the birds, and placing their identity beyond question. In July it was reported that they were nesting on another marsh in the vicinity, but this proved false, the birds in this case being merely Sheld-duck, as Mr. Craig discovered. My informant adds that it is thought that any Snow-Geese seen in Essex this summer, must have been birds that had escaped from Woburn. It would be well to have verification of this.

A. LANDBOROUGH THOMSON.

TUFTED DUCKS BREEDING IN BEDFORDSHIRE.

I AM very much surprised to read in the September number (p. 114) that there is only one previous record of the breeding of the Tufted Duck (*Fuligula cristata*) in Bedfordshire. This can only be because it is such an ordinary occurrence that it has not been thought worth reporting. To my certain knowledge, Tufted Ducks have bred in the neighbourhood of Woburn for the last nine years. These are not imported birds; and though some breed in the park, the greater number breed outside,

M. BEDFORD,

BREEDING OF THE GREAT BLACK-BACKED GULL
INLAND IN IRELAND.

IN the *Birds of Ireland* (p. 340), Mr. R. J. Ussher states that the district round Naran (co. Donegal) is the only part of Ireland in which he has ascertained that this Gull breeds on islands in fresh water loughs.

On the evening of June 15th, 1911, when on a very hurried visit to an island in a lake in north-west Ireland, about eighteen miles inland from the sea as the crow flies, on which a colony of Lesser Black-backed Gulls (*L. fuscus*) nests, my man found and brought to me two eggs which seemed to be too large to belong to the aforesaid species. Mr. Jourdain, to whom they were submitted, kindly wrote me, under date June 28th, 1911: "I have carefully measured them and compared them with my series, and on the whole think I am safe in ascribing them to the Great Black-backed Gull. But gulls' eggs are notoriously difficult to identify, and there is a *bare possibility* of their being very abnormal specimens of *L. fuscus*. After giving his reasons pro and con, he adds: "Still, I am convinced that your eggs are *L. marinus*."

On July 9th, Mr. Burkitt, the county surveyor, wrote to me that on May 13th, he, with a friend, Mr. Stoney of Monks-town, went to the island in question, found an egg of apparently *L. marinus*, watched the Gulls for some time, and that Mr. Stoney was of opinion there were several pairs of *L. marinus*. On May 29th, Mr. Burkitt alone paid a second visit to the island, and found a nest of *L. marinus* with two eggs close to the single egg observed on May 13th, but which had since been sucked, and easily distinguished the parents through their anxiety as to the nest and chasing *L. fuscus*, their different note, heavier flight, and great size. On this occasion he was definitely sure of one pair only. I submitted this letter to Mr. Jourdain, who wrote me under date July 18th, 1911: "After the additional evidence you have now brought to light, there is no doubt whatever that *L. marinus* breeds on Gay Island." I may say that on various occasions I have thought I have seen on this island and at other parts of the lake *L. marinus*, and that in May, 1909, I found on the island a Gull in a state of decomposition, and forwarded the head and neck to my friend Mr. Pycraft, who kindly identified them, pronouncing them to belong to *L. marinus*.

HERBERT TREVELYAN.

[By a curious coincidence the last number of the *Zoologist* (September, 1911, p. 349) contains a note by Mr. R. Warren

on a pair of Great Black-backed Gulls found breeding by Mr. H. Scroope on a grassy island in Lough Conn in north Mayo (the name of the lough is written "Corm" *loc. cit.*, but this is apparently a misprint). Mr. Warren says that this is the first instance he has known of the Great Black-backed Gull breeding on an inland fresh-water lake in Ireland. It is at least nine or ten miles from the sea, and twelve or fourteen miles from Downpatrick Head, the nearest breeding haunt on the coast. The grassy island in question was also frequented by Black-headed Gulls, and the destruction of their eggs by their larger relatives must have been enormous. Mr. Scroope took the three eggs of the Great Black-backed Gull in order to prove the correctness of his identification, as a pair of Lesser Black-backed Gulls had frequented the lake for some years past, and their fledged young were seen accompanying their parents.—Eds.]

SOOTY SHEARWATERS OFF THE WEST COAST OF IRELAND.

WHEN on my yacht on August 17th, 1911, off the west coast of Ireland, between Eagle Island and Black Rock, I saw a large number of Sooty Shearwaters (*Puffinus griseus*); there was a strong south-westerly breeze at the time. The following morning, when the wind had changed to the north-west and the sea was calm, I returned to the same place, hoping to have another look at them, but they had all gone, as also the Manx Shearwaters of which there had been a great number the previous day.

M. BEDFORD.

[The above is an interesting addition to Mr. H. Becher's observations in the autumn of 1892, 1899, 1900, and 1901, when he saw considerable numbers of Great and Sooty Shearwaters off the extreme south-west of Ireland (*cf.* Vol. II., p. 372).—Eds.]

FULMAR BREEDING IN IRELAND.

MR. R. J. USSHER gives a full account in the *Irish Naturalist*, 1911 (pp. 149-152), of the important discovery of the Fulmar (*Fulmarus glacialis*) breeding in Ireland.

On July 10th, 1911, Mr. Ussher was on the northern coast of Mayo, and was told by a boatman that there were white "Cawnoges" in one of the cliffs, and that they had appeared there some four years ago, and were increasing. On proceeding to the place Mr. Ussher found that these birds were nesting in a great sea-cliff some 700 feet high, and on ledges scattered here and there he counted on July 11th

eighteen sitting birds, and remarks that there were probably more out of his range of vision. All that he saw were in about the same part of the cliff, and about 400 feet above the water. Mr. Ussher very carefully and clearly identified the birds with powerful binoculars, and afterwards had a close view of several which flew near his boat, and there can be no doubt that they were Fulmars.

Mr. Ussher has been informed since his first brief report of this discovery (*t.c.*, p. 148), by Mr. Nevin H. Foster, that Messrs. H. Malcomson and E. Green saw a colony of about twenty Fulmars on an Ulster cliff in May of this year, and were informed that these birds first appeared there in 1910. Mr. R. M. Barrington follows (pp. 152-154) with some general remarks on the discovery, in which he points out that the Hooded Crow is called "White Caurogue," which might have been the origin of the name given to the Fulmars by the boatman.

The Fulmar has previously only been known in Ireland as a visitor, seen frequently in the Atlantic twenty to eighty miles off the western and northern coasts, and rarely coming to land except when storm-driven. The extension of the breeding-range of the bird to northern and north-western Ireland is particularly interesting in connexion with the increase of the bird and extension of its range in Scotland, which has been noted for some years past.

Briefly, this extension may be chronicled as follows: Originally confined to St. Kilda; in 1878 found breeding in Foula, Shetland, and had probably done so previously; in 1891 reached the Orkneys; in 1897 birds seen at Cape Wrath (Sutherland) were thought to be breeding; while a colony was certainly nesting in 1901 (and probably 1900), on Handa (Sutherland); breeding about 1900 at Dunnet Head (Caithness); some were seen on Barra in 1899, and eggs were found in 1902; the Flannan Isles were certainly tenanted in 1902, and probably some years previously; meanwhile they were spreading to several new localities in the Orkneys and Shetlands, and reached Fair Isle in 1902; at N. Rona they were established in great numbers in 1910; and in 1911 Mr. Meiklejohn recorded (*supra*, p. 56) a considerable southward extension on the Scottish mainland, namely to Berriedale Head in Caithness.

It should be noted that in almost all these new breeding places, a considerable increase in the birds has been recorded a few years after their first arrival, so that their appearance in Ireland is not unexpected.

H. F. WITHERBY.

THREE BROODS OF BLACKBIRDS REARED FROM ONE NEST.—In the *Zeitschrift für Oologie und Ornithologie*, XXI., p. 15, Herr P. Kreffit gives particulars of a nest of Blackbirds (*Turdus merula*) which was used three times in succession by a pair of birds for breeding purposes, and asks whether any similar instance has been known to occur. Of course many instances are on record in which the same nest has been used twice, but the only case in which we are aware of three broods having been reared in one nest in England, is that recorded in the *Field* of June 15th, 1901, where Mr. E. Hawes gives details of an occurrence of this kind in an old arbor-vitæ stump in his garden in Richmond during the spring of 1901.

GOLDEN ORIOLE SEEN IN YORKSHIRE.—Mr. S. Crook, records (*Nat.*, 1911, p. 330) that he and a friend saw a male Golden Oriole (*Oriolus galbula*) at a distance of ten yards, on July 9th, 1911, at Hackness, near Scarborough. The Golden Oriole is rarely observed so far north as Yorkshire.

SWALLOW NESTING IN A TREE.—Mr. E. A. Fitch in the *Zoologist*, 1911 (p. 314), describes the nest of a Swallow (*Hirundo rustica*) built in the outside branch of a pendent maple tree, hanging over a tributary of the River Chelmer. Several similar instances have been previously recorded (cf. Yarrell, 4th Ed., II., pp. 343, 348; *Birds of Lancashire*, 2nd Ed., p. 56; *Field*, September 5th and 12th, 1885; *Zool.*, 1886, p. 486, and *Ibis*, 1896, p. 135, etc.), but the occurrence of such nests is sufficiently rare to deserve record.

HOOPES BREEDING IN CONFINEMENT.—In *Bird Notes*, 1911 (pp. 221 and 257), Mr. M. Armstein describes the successful rearing of five young Hoopoes in his aviary in 1911. They were hatched on July 8th, the hen incubating alone. During the whole period she was never once seen off the nest, but was fed constantly by the male. Before nesting the cock went through a curious performance: taking a mealworm he offered it to the hen, and when she opened her bill to receive it he would place it almost inside, but then withdraw it again. This was repeated for five or six minutes. After the young were fledged, this performance was repeated on July 28th.

GREEN SANDPIPER IN THE OUTER HEBRIDES.—Mr. A. T. A. Ritchie records (*Field*, 26.8.1911, p. 528) that on August 3rd, 1911, he shot a male example of *Totanus ochropus* near

Rodel, South Harris, Outer Hebrides. The Green Sandpiper has only once before been recorded from the Outer Hebrides, viz., in South Uist, on October 31st, 1901 (*cf.* Vol. II., p. 269).

THE LATE MR. ALEXANDER WILLIAMS.—Only a limited number of friends were aware that Mr. Alexander Williams of Jerez de la Frontera, who recently died at Ben Rhydding, suddenly in his seventieth year, while on a visit to England, was really the prime mover in the attempt to re-introduce the Great Bustard (*Otis tarda*) to Norfolk. He managed to get together at considerable expense no fewer than sixteen of these birds, and with the co-operation of Lord Walsingham and Lord Iveagh, they were liberated at Elveden in 1900. Though some of the birds actually nested, several were wantonly shot, and others came to various untimely ends or strayed away, so that the experiment ended in failure. A photograph of one of these Norfolk nests is reproduced in the *Field*, September 16th, 1911 (p. 678), together with some notes on the subject of the re-introduction. Mr. Williams was one of the lessees of the famous Coto de Doñana, now the property of Señores Garvey, known to ornithologists as the breeding ground of Flamingos, most of the European Herons, and many other interesting species, and his hospitality was freely extended to visiting naturalists.

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REVIEWS

The Grouse / in Health and in Disease / Being the Final Report of the / Committee of Inquiry on Grouse Disease / Volume I / with 59 full page plates, mostly in colour / and 31 illustrations in the text / Volume II / Appendices / with 41 maps / London / Smith, Elder & Co., 15, Waterloo Place / 1911 / [All rights reserved].

THE eagerly awaited "Final Report of the Committee of Inquiry on Grouse Disease," has now been published, and seasonably enough was in the hands of subscribers two days before the "Festival of St. Grouse."

Those who received the *Notes on the Grouse*, an interim report of 71 pages, issued by the Committee in 1906, were probably somewhat staggered by the bulky appearance of the "Final Report," in two volumes quarto, containing some 660 pages and upwards of 140 illustrations and maps.

A cursory glance through these ponderous tomes will be enough to assure the ordinary reader of the thorough manner in which the Committee have set about their task, but it is to be hoped that the mass of information which is thus presented to the public, may not lose its utility from its very massiveness. In these days of hurry and scurry there is a general desire to come to the point quickly; and searching for the needle of advice in the haystack of records and figures, is an occupation reserved for the comparatively few. Had Lord Lovat's excellent remarks on "Causes of Mortality in Red Grouse" (Chap. VII.), "Moor Management" (Chap. XVII.), "Heather-burning" (Chap. XVIII.), "Keepers and Keeping" (Chap. XX.), and "Stock" (Chap. XXI.), been issued as one volume, and the remainder of the report as the other, much practical advice would probably have been more widely disseminated. In this way the labours of the Committee would have more quickly borne fruit; but perhaps it is not impossible that some such brochure may yet be prepared for the use of landlords, sportsmen, and their employees who are not so fortunate as to be able to follow Drs. Shipley, Fantham, and others readily in their pursuit of *Trichostrongylus pergracilis* and *Eimeria (Coccidium) avium* through the intestines of the much-plagued Grouse.

If we dismiss the objection that the work might more usefully have been divided into two parts—the one scientific, the other unscientific—there remain but few suggestions to make on the work as a whole. Indeed, it is as a whole

that the report both astonishes and gratifies the reader. That the cost of the inquiry, extending over a period of six years, was only £4,336, is sufficient testimony of the liberality with which every person connected with the inquiry must have given his services. We learn from the Appendix (Vol. II., p. 26) that the Committee, now that they have published their Report, have a debit balance of about £550, which they hope to reduce partially by the sales of the work under review ; and it may here be suggested that were a brochure, on the lines suggested above, published, its sale might well prove a help in working off this debt.

The frontispiece and the plates, drawn by Dr. Edward A. Wilson, illustrating the various plumages of the Red Grouse, are disappointing. "Young chicks" are not so mature in appearance as is indicated in the former, and the plates drawn from typical skins lack detail to a degree which renders them inartistic, though they serve their purpose in demonstrating the differences in the plumage at different seasons in either sex, and in individuals.

The present writer is not in a position to criticize the work of the "Doctors," if indeed criticism is possible ; and as regards the sequence of plumages in the Red Grouse, he will not rush in where angels should fear to tread. It is in vain that he has searched the index for the mention of the Rabbit or the Mountain-hare ; nor has he been able, when reading Lord Lovat's remarks, to find any but the most cursory animadversions on these rodents. The guidance of a capable authority on these subjects would have been welcomed.

The whole Report has perhaps been written too much from the standpoint of the large proprietor of recognized grouse moors. The small proprietors of moor-land are sufficiently numerous to be a source of danger, in any case, to their larger neighbours ; and if observations could have been carried out in districts where Red Grouse are not numerous, and where landlords are less able to cope with the expense of putting their moors in order, the Report might have gained in being more widely beneficial.

This work is announced as "the Final Report" of this Committee, but if, as is stated (Vol. I., p. 498) "the value of grouse shootings as a factor in the national prosperity" amounts to upwards of £2,000,000 per annum, surely something more than an occasional unpaid Committee is required to be in existence to advise on the maintenance of so valuable an asset ? The Board of Agriculture and Fisheries might well add to its permanent staff, experts in avian matters ; not only to study the welfare of Red Grouse, but also a number

of other subjects connected with birds and their relation to man. Sir Edward Strachey has recently announced that some £50,000 is to be bestowed by the Board of Agriculture and Fisheries on "agricultural research and kindred subjects," and "agricultural zoology" is one of the heads specially mentioned. It would therefore seem possible that an Ornithological Bureau, such as has long been effective in the United States of America, may at no distant date have a beginning in our own country.

To return, in conclusion, to the book under review : The Committee has revealed to us the cause of Grouse disease, has discussed exhaustively various ailments from which Grouse suffer, has exploded the theory of "frosted heather," and has given us a history of "Grouse disease." The result of the 660 odd pages might be summarized, from a practical point of view, thus :—

- (a) Do not attempt to keep a larger stock of Grouse than your moor will provide food for in the early spring :

and

- (b) Burn your heather in such a rotation as to provide the maximum amount of food-supply for your Grouse at that season.

As a whole-hearted piece of work *The Grouse in Health and in Disease* will ever be regarded as a monumental monograph, which will always be referred to as the authoritative work on the subject ; it is only to be feared that its present monumental character may be prejudicial to its immediate utility.

H.S.G

The North Staffordshire Field Club : Annual Report and Transactions. 1910-11. Edited by W. Wells Bladen. Vol. XLV. Price 5s.

THE Annual Report of this flourishing Society contains, as usual, more than one article of interest to ornithologists. Mr. J. R. B. Masefield contributes his sectional report on Zoology (Aves, pp. 68-76), in which he informs us that a new Protection Order for the county has now received the sanction of the Home Office. In this case we are glad to see that the County Council obtained Mr. Masefield's assistance in drafting the order, and consequently it is drafted on more scientific lines than is usually the case, though still susceptible of considerable improvement. Thus the protection of eggs of purely marine forms in an inland county seems somewhat unnecessary. The classified records contain several items

of interest to students of the county fauna, but for the benefit of future workers we would appeal to the compiler to append the year to *all* records, or else to arrange them under separate years. The Report is dated 1910-11, and published in June, 1911, so that it is not always easy to decide whether records relating to "last winter" or specific dates between January and April (with no year appended) refer to 1910 or 1911. We are, however, grateful to Mr. Masefield for tabulating his records in scientific order, and thus rendering them much more convenient for reference.

Pochards visited Gailey Pools in considerable numbers on March 20th, 1910, no fewer than 250 being observed on that date. The Tufted Duck has increased as a breeding species at Patshull, where seventeen nests were found in 1910; but it shows a marked tendency to become a summer rather than a permanent resident. A Purple Sandpiper is recorded as having been seen in March, 1909, at Chartley. This is a new species to the county list. There are also additional records of the Ruff, Red-throated Diver, and other scarce visitors.

Mr. W. Wells Bladen's "Bird Notes" (pp. 94-105) are illustrated by photographs of the nests of Wheatear, Pied Wagtail, and Meadow-Pipit, taken on the slag-heaps of the Potteries, where these birds now breed regularly. At least eight pairs of Wheatears nested in the Shelton slag-heaps, half of the nests being within sixty yards of the place where the molten slag is tipped. Still more remarkable is a note of a pair of Stonechats building in a cinder wall, but unfortunately in this case the nest was deserted subsequently. F.C.R.J.

BRITISH BIRDS

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NOTES ON THE BREEDING HABITS OF SOME OF OUR WINTER MIGRANTS IN THE SWEDISH PROVINCES OF JEMTLAND AND LAPLAND.

BY

W. G. SHELDON, F.E.S.

DULL days during a stay in these regions in June and July, 1911, when the chief objects of my visit, diurnal *Lepidoptera*, were not to be found, enabled me to make the following observations on certain birds familiar to us all in winter, but not breeding in the British Islands.

I arrived in Jemtland on June 4th, and left it ten days later, arriving at Abisko on the south side of the Torne Träske on June 16th, and remaining there until July 18th. The Torne Träske is a very beautiful lake sixty kilometres in length, and of varying widths, which perhaps average eight or nine kilometres. This lake is surrounded on all sides by mountains of from 2,000 feet to 5,000 feet in height, which rise steeply from it, and are covered for the lower 500 feet by forests of birch, with an occasional pine and mountain-ash; in the swamps, which are numerous, there are thickets of sallow of many species. These forests are composed of trees twenty feet or so in height, except in the more sheltered spots, where they reach thirty and even forty feet. The undergrowth is chiefly *Vaccinium* of all four of our British species, and in the open, swampy moors which occur at intervals, there is a very fine Alpine flora of such plants as *Silene acaulis*, *Saxifraga oppositifolia*, *Dryas octopetala*, *Trientalis europæa*, *Andromeda pollifolia*, *A. tetragona*, *Azalea procumbens*, *Rhododendron lapponica*.

Perhaps the most conspicuous bird I saw in Sweden was the Fieldfare (*Turdus pilaris*), which the Swedes call "Kolfrast." In the bogs of Mattmar, in Jemtland, I saw several pairs breeding, in all cases in pine or spruce trees; of two of these nests examined on June 9th, one had five eggs hard-set, the other four eggs not incubated; this was at an altitude of 1,014 feet according to

“Baedeker.” At Aare, some twenty miles further west, which has an altitude of 1,240 feet, the broods were much more backward—probably the proximity of snow-clad mountains accounted for this. There was here quite a large colony ; probably from one to two hundred pairs frequented the woods on the lower slopes of the mountain Aareskütan, but I could only find two nests with eggs up to the day of my departure, June 14th. One of these had five eggs, and the other two, an incomplete clutch ; the clutch of five was not incubated. Some half-dozen other nests, partly finished, were all I could discover ; and evidently the bulk of the birds, from their behaviour, had not commenced to nest.

On my arrival at Abisko, some seven hundred and fifty miles further north, I found the breeding season much more advanced ; there had been a spell of fine, warm weather, which had brought things on, though even then the birches were only bursting into leaf, and many of them were still bare. Practically all the birds seemed to have nests with eggs, in some cases incubated. Out of the dozens of nests examined, only one was empty. This nest contained four eggs by June 28th, and as this number was not increased, I suspect from the fact that certain nests near had been robbed, that it was a second clutch.

The species was very abundant on the shores of the Torne Träske ; there must have been several hundred pairs breeding between Abisko and the small village of Bjorkleiden, some seven kilometres further west.

The Fieldfare is, during the breeding season, in many respects, a distinctly interesting bird. He cultivates the acquaintance of man, placing the nest in a very conspicuous position, usually in the fork of a birch tree, or on a horizontal branch, often immediately over a frequented pathway, where one cannot miss seeing it ; and further to advertize that a nest is near, the first intimation of its proximity received is, that the male commences to scold furiously long before it is in sight,

say when one is seventy or eighty yards away ; the female sits on the nest, if she is incubating, until one gets to within a few yards of it, then joins the male and scolds even more incessantly than he does. If the pair have young, both commence to scold at the longer distance. They are not always content with mere vituperation, and the female especially, is apt to discharge the contents of her bowels at an intruder, from the distance of two or three feet, with very good aim, should he incautiously turn his back to her.

The male is a bold bird, and any wandering hawk or crow that approaches the nest, is chased away after the manner of our Mistle-Thrush at home. One wonders if these chases do not sometimes end in tragedy. I well remember some years ago watching on a Swiss pass the approach of a large hawk or harrier, which was leisurely winging its way along ; just as it passed me, a bold male Redstart rose from a heap of stones near by, in which no doubt its mate was incubating, and "mobbed" the hawk valiantly. At first the larger bird avoided the attack, but after a few twists, getting angry, or perhaps being hungry, it turned upon its pursuer, and it was a case of the hunter hunted. The Redstart, too late, saw its danger, and fled towards mother earth. At the second swoop it was seized, and borne to the ground, and when I got to the spot a few minutes later, only a few feathers remained of a brave but rash father.

The only case I came across in which an objectionable bird was allowed in a Fieldfare's domain, was one in which a pair were breeding in close proximity to the eyrie of a Rough-legged Buzzard. The bird of prey in this instance was patiently tolerated—no doubt for very good reasons.

The scolding note of the Fieldfare is strikingly like that used by the Mistle-Thrush for this purpose, and is occasionally interspersed by the usual winter "chack" note. One chiefly hears the song as the male takes a

short flight from tree to tree, often finishing when perched upon the topmost horizontal twig of a spruce or pine. The hen commences to sit immediately the first egg is laid. The most remarkably situated nest I saw was at Mattmar. A pine tree had been blown over, the head resting on the trunk of another tree some distance from the ground ; underneath the head of this tree ran a path, along which probably a score of people passed each day. In this head, immediately over the path, at a height of about six feet, a pair of Fieldfares had built their nest, and the hen at the time of my visit was incubating. It was the first nest I had seen, and observing that the clutch of five was a well marked one, I took them to the hotel at which I was staying ; but there finding they were on the point of hatching, I returned the four uninjured ones to the nest as soon as possible, but more than forty minutes after I had taken them thence. The mother saw me replace them. On passing later on the same day she flew off. The next day the four young were hatched out.

The birds apparently return to the same nesting colony year after year, for I saw plenty of old nests amongst the new ones. The lowest nest observed was about four feet from the ground, and the highest about fifteen or sixteen feet.

Redwings (*Turdus iliacus*) were common at Abisko, but in nothing like such numbers as the previous species. I discovered about half-a-dozen nests, and no doubt there were plenty of others about, but the Redwing does not advertize the position of its domicile so much as the Fieldfare, though it scolds quite as vigorously when it is discovered. The scolding note is very shrill and reminds one most of the alarm note of the Wren, but of course it is much louder. It mingles the scolding note with one which is common to both the Blackbird and Song-Thrush, and which I should describe as "pep." One hears also the winter call-note "eegh" at intervals. Both male and female when scolding approach an intruder within five or six feet. The male sings very persistently as he

sits on the topmost twigs of a birch tree, and the song is often continued until after midnight.

Most of the nests had young from June 20th onward, but one I discovered on this day contained six eggs, much incubated. On July 7th, however, I came across a nest containing only one egg freshly laid; evidently this was a second brood.

The Redwing at Abisko builds higher up the trees than the Fieldfare, many nests being fifteen to twenty feet from the ground. The nest is not so conspicuous as that of the other species, its smaller size helping it in this respect; but there is a certain attempt to make it fit with its surroundings, whereas the Fieldfare's nest is usually so placed that it looks like a great wen standing out from the tree or sitting on a bare branch.

Bramblings (*Fringilla montifringilla*) were abundant at Abisko. They were nesting to a certain extent gregariously, that is to say half-a-dozen or a dozen pairs, with a space of perhaps a dozen or twenty yards between each nest. Outside these small colonies there would not be other pairs breeding for a distance of some hundreds of yards. The nests were invariably placed in the main fork of a birch tree at a height of from eight to fifteen feet above the ground. The clutches of all examined consisted of five or six eggs, about the same number of each. In the first nest found the clutch was completed on June 23rd, and by the end of the month in all the nests I discovered, the hens were incubating. In one nest the five eggs were the scarce blue variety; this is very different from the normal Brambling's egg and closely resembles that of the Bullfinch. The Rev. F. C. R. Jourdain, however, has identified them as belonging to this species. The nest resembles that of a Chaffinch, but is somewhat larger, and not so neat; it is formed outside of moss, and lined with feathers and reindeer's hair. The notes of both male and female at the nest were similar, and consisted of (1) a note somewhat resembling the "pink, pink" of a Chaffinch,

but which I should describe as "tzink, tzink"; (2) A note which is used by the Greenfinch, and which I should render "e-eh," "e-eh"; (3) The usual winter call-note of the species. All these notes are used at the nest, the first most frequently.

Mealy Redpolls (*Linota linaria*) were breeding freely in the birches at a height of from four to six feet, forming very neat and inconspicuous nests in the fork, slightly larger than those of the Lesser Redpoll, but very much like them. They were plentifully lined with feathers. The usual clutch was five. There had been some abnormally cold weather just previous to my arrival in Lapland, during which many of the eggs of this species had got frozen, and where this occurred the birds had deserted the nest. These pairs were nesting a second time early in July.

I was passing through a small grove of low birches on June 17th, and noticing a plaintive twittering amongst them, some yards distant, I walked towards the quarter from which it proceeded, to investigate. I found the sounds proceeded from a female Redpoll on a nest at a height of about five feet. I stood quite still at a distance of about two feet from her for perhaps a minute, during which time she continued to scold me. I then slowly stretched out my arm towards her. When my hand was about six inches distant she fluttered on to a low branch three or four feet on the other side of the nest, and was then joined by the male. They both scolded me from this spot for half a minute or so. Meanwhile I put my hand in the nest, which contained newly-hatched young, and then withdrew it, maintaining my stand. Immediately my hand was withdrawn the hen returned to the nest, and settled down upon it with her head turned towards me, scolding all the time. The male remained hopping about the branch left by the female, and scolding. It was one of the prettiest ornithological episodes I have seen. Both birds were in perfect breeding plumage, and were very beautiful,

Quite half-a-dozen pairs of Rough-legged Buzzards (*Buteo lagopus*) had their eyries within a one-mile radius of the hotel at Abisko. These nests were invariably placed on a shelf amongst a ridge of rocks. The first was discovered on June 22nd, and then contained five eggs, much stained and hard set. Another nest had, on June 30th, the same number of newly-hatched young. The other nests I could not examine except in one instance. This was empty, and was possibly an alternative eyrie of a pair which were then breeding close by. The first nest was on a shelf about six feet from the top of a ridge of rocks some twenty feet in height, which rose out of the Abisko River, and overhung it. All the nests examined were formed of sticks outside, lined with grass and fresh green shoots of pine and *Vaccinium*. The other nest was in a low, isolated kopje which rose out of the forest, and was placed on a shelf about six feet from the top, and only approachable with the aid of a rope. This situation, however, did not safeguard the young birds for in both this and the first nest examined they were poked out of the nests by long sticks, I suspect by Lapps, who, I understand, credit the Buzzard with destroying Reindeer fawns.

The birds have themselves largely to thank for this treatment, for as one approaches the vicinity of the nest, the male, which is always on the watch on some prominent tree or scarp of rock near-by, rises in the air, and commences to mew and circle round, and if one walks towards him, he will retreat in the direction of the nest; finally, when one is quite close to it, circling round the crag in which it is placed, and by his anxiety plainly indicating its position. One male discovered me whilst I was half-a-mile distant, and led me quite another half-mile straight towards his domicile. I discovered the nest on the banks of the Abisko River from below at some distance off, but being unable to see its contents from this position, I approached it from the rear, and getting immediately above, looked cautiously

over the edge of the cliff. The male was all the time circling round and mewling incessantly. I then saw the tail and hind portions of the female on the nest, about six feet below me. She moved about restlessly, being evidently disturbed by the actions of the male. After a short time, however, she settled down on the eggs, and was quite still for some minutes, after which she turned round on the nest and caught sight of me looking down at her. Of course, she at once flew off and joined the male. Both continued to circle round and mew whilst I was in the neighbourhood of the nest.

In addition to being noticeably larger and lighter coloured, the female was distinguishable by the mew being in a distinctly higher key than that of the male. Both birds continued to circle round at a height of perhaps one hundred feet, so long as I was in the vicinity of the nest.

I could not distinguish the mew from that of the Common Buzzard (*Buteo vulgaris*), but it is hardly possible to mistake one species for the other, the white tail, with one or two black bars, of the Rough-legged Buzzard, being easily recognized whilst it is flying over one.

A brood of young Hawk-Owls (*Surnia ulula*) were to be seen any day in early July sitting on the dead branches of the birch trees, quite close to the Abisko Hotel. They were very tame, merely moving to another tree thirty or forty yards away when one got underneath the tree on which they were perched. I did not see any attempt on the part of the old birds to swoop at the intruder, as mentioned by Wheelwright, but perhaps this was because the young were well fledged.

THE "BRITISH BIRDS" MARKING SCHEME.

PROGRESS FOR 1911 AND SOME RESULTS

BY

H. F. WITHERBY.

ONCE again I am able to report decided progress in the work of our enthusiastic band of "ringers." The number of birds marked has steadily increased until this year the splendid total of just nine thousand five hundred has been reached. In the first year of the inquiry only 2,200 rings were used, but in the next year 7,900 were placed, so that the number of birds "ringed" by the readers of BRITISH BIRDS now amounts to nearly twenty thousand.

To the total for the year, as will be seen in the list printed below, Mr. H. W. Robinson has contributed the largest number, namely, seventeen hundred and fifty, while Mr. F. Smalley has done six hundred and eighty-one, so putting their figures together, to compare with last year, these gentlemen have "ringed" nearly two thousand five hundred birds between them, a remarkable number. Mr. N. H. Joy is not far behind with one thousand and sixty-six, Mr. R. O. Blyth reaches over four hundred, and Messrs. A. G. Leigh, J. Bartholomew and J. R. B. Masefield have each three hundred or over. Quite a number of "ringers" exceed two hundred, while without the long list of those coming under that figure our total would have been found wanting.

This splendid total is due not only to the unabated zeal of our "ringers," but also to the generosity of those who have come forward with financial support towards the expenses of the scheme. As these expenses naturally grow with the increase in the number of rings issued, I may here take the opportunity of reminding those who are desirous of seeing the inquiry carried on, that subscriptions, however small, are very welcome.

That the inquiry will eventually prove scientifically useful can, I think, no longer be doubted, but it is equally certain that it must be continued for some years before

really valuable results can be arrived at. The danger of drawing conclusions from too slender a basis of fact must be studiously avoided. So far as migrational movements are concerned, it is tempting to arrange “ routes ” on the basis of a comparatively few “ recoveries,” but because some individuals of a species take one route, it must not be inferred that all birds of that species go the same way, or even migrate at all. This much anyway we have already proved, and it would be fair to say that of certain birds we have now got just enough results to show how dangerous it would be to draw conclusions from them !

Having said this much in warning, I shall not be misconstrued if I point to a few results which are interesting in themselves, and may prove, in conjunction with others, to be valuable.

Four Blackbirds “ ringed ” in Ayrshire in June, July, and August, 1909, were found in the same place, two in July and August, 1910, and two in June and July, 1911. Two “ ringed ” in Berkshire in July, 1910, were found in the same place in December, 1910, and March, 1911, respectively. But another “ ringed ” near Glasgow in June, 1910, was found in Pembrokeshire in January, 1911.

Of Starlings caught in his useful cage-trap, Mr. Joy has already published many interesting records, showing that a number marked in January in Berkshire stayed in the same place through the following March to October, yet one marked in February travelled to Kent in the same month. Two Starlings marked in September in Lincolnshire were found in December in Pembrokeshire and Yorkshire, while another marked in October, was found in the following March in the original place.

A Meadow-Pipit marked in Yorkshire in June, 1910, was found near the same place in May, 1911. Two others marked in Yorkshire in May and July, 1911, have been found in south-west France, in September and October.

Three Mallards marked in Norfolk in June, 1909, were found in the same place in November, 1909, another

marked in Dumfriesshire in June, 1910, was found within a few miles in October, 1910, but one marked in Essex, in May, 1910, was found in West Prussia in August, 1911.

Two Teal marked in Essex in February, 1910, were found near Hamburg and in Cumberland respectively, in the following August and November.

Two Lapwings marked near Glasgow in June, 1909, and June 1910, were found respectively in the Basses Pyrénées, France, in November, 1909, and near Kilkenny, Ireland, in February, 1911, while another marked in Yorkshire in July, 1909, was found in the same county in the following December.

Of Black-headed Gulls we are collecting a fine series of records, which should prove of great value with the additions that are certain to come during the next few years. The following Lesser Black-backed Gull records may be mentioned: One marked in Westmorland in July, 1911, was found in Lancashire the following September, and another marked in the same place in June, 1910, was found at the mouth of the Loire, France, in September, 1910; one marked at the Farne Isles in August, 1910, was taken at Hartlepool in October, 1911, and another marked in Argyllshire in July, 1910, was reported from Aveiro, Portugal, in December, 1910.

Of other "recoveries" abroad we may mention Common Terns marked in Cumberland and Renfrew, found in Spain and Portugal. Swallows marked in Lancashire and Staffordshire, reported from Indre et Loire and Charente Inférieure in France. A Pied Wagtail marked in Sussex in June, found the following December in Portugal. A Greenfinch marked in Staffordshire in June, reported the following April from Aisne, France.

I must repeat that the records are far too few for us to draw inferences from them, and indeed many of those mentioned above show this by their apparent contradictions; but they also show what valuable results will be obtained if our "ringers" continue their work, as I am sure they will.

NUMBER OF BIRDS “RINGED.”

MESSRS. H. W. Robinson (1,750), N. H. Joy (1,066), F. Smalley (681), R. O. Blyth (429), A. G. Leigh (380), J. Bartholomew (301), J. R. B. Masefield (300), W. I. Beaumont (270), W. T. Blackwood (250), M. Portal (243), J. D. Patterson (240), J. S. T. Walton (224), W. E. Suggitt (216), W. Stewart (207), A. Bankes (202), H. W. Ford-Lindsay (187), Dr. N. F. Ticehurst (170), Messrs. T. Smith (145), J. Steele Elliott (139), North London Nat. Hist. Society (C. L. Collette, Sec.) (139), Messrs. A. Mayall (121), C. T. Cobbold (95), T. C. Hobbs (89), G. R. Humphreys and W. G. Edwards (87), Miss A. C. Jackson (81), Messrs. G. P. Hony (80), M. W. Compton (78), R. E. Knowles (77), J. Murray (gamekeeper to Mr. H. S. Gladstone) (71), Major H. Trevelyan (62), Miss C. M. Acland (62), Messrs. W. C. Cattell (59), T. Hepburn (58), Captain W. Mackenzie (58), Messrs. G. J. van Oordt (49), T. F. Greenwood (48), H. Bentham (47), H. S. Greg (44), H. F. Witherby (44), G. T. Atchison (43), D. G. and Miss M. Garnett (43), Messrs. C. Collier (42), J. Hutton (gamekeeper to Mr. J. Bartholomew (41), W. Davies (38), W. S. Medlicott (36), Mrs. Patteson (34), Captain B. van de Weyer (31), Messrs. H. L. Popham (28), E. A. Wallis (21), R. M. Barrington (20), W. A. Nicholson (20), R. Starley (18), B. Starley (18), S. Maples (18), E. G. B. Meade-Waldo (15), I. Clark (14), C. F. Archibald (14), Captain C. H. T. Whitehead (14), Mr. W. W. Lowe (12), and others who have ringed less than ten birds each

	'09	'10	'11		'09	'10	'11
Thrush, Mistle ..	2	48	40	Tit, Willow ..	—	1	—
Thrush, Song ..	71	625	693	Nuthatch ..	—	4	5
Redwing ..	—	7	20	Wren ..	9	38	62
Fieldfare ..	—	48	30	Creeper, Tree ..	—	3	3
Blackbird ..	83	505	421	Wagtail, Pied ..	12	29	42
Black-Ouzel ..	—	—	9	Wagtail, White ..	—	—	6
Wheatear ..	1	15	1	Wagtail, Grey ..	5	6	13
Whinchat ..	7	30	28	Wagtail, Yellow ..	1	—	—
Stonechat ..	—	10	19	Pipit, Tree ..	14	26	19
Redstart ..	1	15	35	Pipit, Meadow ..	27	32	75
Redstart, Black ..	—	5	—	Pipit, Rock ..	—	6	3
Redbreast ..	41	217	322	Shrike, Red-backed	2	15	13
Nightingale ..	—	11	4	Flycatcher, Pied ..	—	—	5
Whitethroat ..	22	53	33	Flycatcher, Spotted	23	65	64
Whitethroat, Lesser	1	19	5	Swallow ..	113	463	594
Blackcap ..	—	7	12	Martin, House ..	13	128	73
Warbler, Garden ..	3	9	13	Martin, Sand ..	—	25	66
Warbler, Dartford..	—	5	—	Greenfinch ..	28	100	208
Wren, Golden-crested	—	16	15	Hawfinch ..	—	—	6
Chiffchaff ..	2	16	5	Goldfinch ..	—	8	2
Wren, Willow ..	50	107	139	Sparrow, House ..	8	109	85
Wren, Wood ..	—	12	27	Sparrow, Tree ..	17	49	24
Warbler, Reed ..	—	4	10	Chaffinch ..	6	103	271
Warbler, Sedge ..	1	4	12	Brambling ..	—	—	3
Sparrow, Hedge ..	18	117	198	Linnet ..	20	65	63
Dipper ..	4	9	22	Redpoll, Lesser ..	—	8	—
Tit, Long-tailed ..	—	3	—	Bullfinch ..	—	8	16
Tit, Great ..	16	127	154	Bunting, Yellow ..	4	13	31
Tit, Coal ..	—	12	26	Bunting, Reed ..	2	8	40
Tit, Marsh ..	—	25	3	Starling ..	21	428	1109
Tit, Blue ..	12	54	144	Jay ..	—	5	3
				Magpie ..	—	7	4

	'09	'10	'11		'09	'10	'11
Jackdaw	11	5	15	Pheasant	7	6	30
Crow, Carrion ..	—	6	11	Partridge	1	1	20
Rook	—	1	64	Rail, Land	3	—	4
Lark, Sky	1	20	39	Moorhen	—	34	23
Lark, Wood	—	—	1	Coot, Common ..	1	4	1
Swift	—	—	5	Curlew, Stone ..	1	4	—
Nightjar	3	—	3	Plover, Ringed ..	—	35	12
Wryneck	14	16	1	Plover, Golden ..	—	2	2
Woodpecker, Green	—	8	—	Lapwing	56	254	280
Woodpecker, Great	—	—	—	Oyster-catcher ..	7	16	8
Spotted	2	2	—	Avocet	—	5	—
Cuckoo	4	4	13	Woodcock	6	10	68
Owl, Barn	—	10	—	Snipe, Common ..	1	23	21
Owl, Long-eared ..	—	2	3	Dunlin	5	1	—
Owl, Tawny	—	13	6	Sandpiper, Common	5	10	29
Owl, Little	—	1	4	Redshank	5	19	12
Hobby	1	—	—	Godwit, Black-tailed	—	4	—
Hawk, Sparrow ..	—	5	19	Curlew	14	10	34
Merlin	1	4	2	Tern, Sandwich ..	57	79	24
Kestrel	1	—	5	Tern, Common ..	786	836	669
Cormorant	—	3	25	Tern, Arctic	25	—	1
Shag	—	4	—	Tern, Common or	—	—	—
Heron, Common ..	14	13	22	Arctic	—	25	5
Grey Lag-Goose ..	—	—	6	Tern, Little	—	31	13
Sheld-Duck	1	24	2	Gull, Black-headed	417	1828	2949
Mallard	11	20	139	Gull, Common	—	184	248
Shoveler	—	2	—	Gull, Herring	5	117	48
Pintail	—	13	—	Gull, Lesser Black-	—	—	—
Teal	1	21	3	backed	12	137	62
Wigeon	—	3	1	Gull, Great Black-	—	—	—
Duck, Tufted	3	—	2	backed	1	8	13
Eider	3	—	—	Kittiwake	4	11	—
Merganser, Red-	—	—	—	Skua, Richardson's	—	2	4
breasted	1	—	—	Razorbill	—	31	3
Pigeon, Wood	3	20	22	Guillemot	—	23	—
Dove, Stock	1	4	6	Puffin	4	15	12
Dove, Turtle	1	11	11	Grebe, Great Crested	1	—	—
Grouse, Red	7	3	19	Grebe, Little	—	1	—
Grouse, Black	2	—	2	Petrel, Storm	1	—	—

NOTES

RECOVERY OF MARKED BIRDS.

MEADOW-PIPITS (*Anthus pratensis*).—B.B., No. D449, marked by Mr. T. Fenton Greenwood at Hebden Bridge, Yorkshire, on July 1st, 1911, as a nestling. Recovered at Mérignac, near Bordeaux, Gironde, France, on September 17th, 1911. Reported by M. A. Doleac.

B.B., No. D872, marked by Mr. J. D. Patterson at Goathland, Yorkshire, on May 28th, 1911, as a nestling. Recovered at St. Julien-en-Born, Landes, Nord, France, on October 9th, 1911. Reported by Miss I. Magnès.

SWALLOW (*Hirundo rustica*).—B.B., No. F754, marked by Mr. J. R. B. Masefield at Harewood, near Cheadle, Staffordshire, on August 4th, 1911, as a nestling. Recovered at Pouzor, Commun de Nancras, Charente-Inférieure, France, on October 3rd, 1911. Reported by MM. N. Mesureau and J. Welsch.

HOUSE-MARTIN (*Chelidon urbica*).—B.B., No. F190, marked by Mr. W. T. Blackwood at Hawick, Roxburghshire, on July 24th, 1911, as a nestling. Recovered at Pont-de-Bigny, Cher, France, on October 12th, 1911. Reported by M. L. Nadot.

STARLING (*Sturnus vulgaris*).—B.B., No. 11852, marked by Mr. N. H. Joy at Bradfield, Berkshire, on January 22nd, 1911, as an adult. Recovered at Hounslow Heath, Middlesex, on October 2nd, 1911. Reported by Mr. T. Perry.

LAPWING (*Vanellus vulgaris*).—B.B., No. 13623, marked by Mr. H. W. Ford-Lindsay at Pett, Sussex, on June 18th, 1911, as a nestling. Recovered at the same place on September 28th, 1911.

COMMON TERNS (*Sterna fluviatilis*).—B.B., No. 21057, marked by Mr. H. W. Robinson at Ravenglass, Cumberland, on July 17th, 1911, as a nestling. Recovered at Exmouth, Devon, on October 9th, 1911. Reported by Mr. W. H. Yeo.

COMMON GULL (*Larus canus*).—B.B., No. 22063, marked by Mr. W. I. Beaumont at Eil Beg, Dunstaffnage, Argyllshire, on June 29th, 1911, as a nestling. Recovered at Ledaig, Argyllshire, about September 29th, 1911. Reported by Colonel F. H. S. Cruickshank.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 24170, marked by Mr. H. W. Robinson, at Ravenglass, Cumberland, on June 16th, 1911, as a nestling. Recovered at Doncaster, Yorkshire, on September 14th, 1911.

B.B., No. 31332, marked as No. 24170 on June 10th, 1911. Recovered at Rampside, Barrow-in-Furness, on August 8th, 1911. Reported by Mr. W. H. Ashcroft.

B.B., No. 24281, marked as No. 24170 on June 19th, 1911. Recovered near Redcar, Yorkshire, on September 14th, 1911. Reported by Mr. C. Appleyard.

B.B., No. 24123, marked as No. 24170 on June 16th, 1911. Recovered at West Hartlepool, Durham, on September 27th, 1911. Reported by Mr. H. Foreman.

B.B., No. 24275, marked as No. 24170 on June 19th, 1911. Recovered at Dree, Dromara, co. Down, on October 6th, 1911. Reported by Mr. R. Heanen.

B.B., No. 23945, marked by Mr. F. Smalley at Ravenglass, Cumberland, on June 12th, 1911, as a nestling. Recovered on the Irwell, near Manchester, Lancashire, on October 17th, 1911. Reported by Mr. A. Chambers.

B.B., No. 30467, marked by Messes. Robinson and Smalley at Ravenglass, Cumberland, on June 13th, 1910, as a nestling. Recovered at Morecambe, Lancashire, on October 23rd, 1911. Reported by Mr. L. Wilkinson.

B.B., No. 22860, marked by Mr. J. S. T. Walton at Denton Fell, Cumberland, on June 11th, 1911, as a nestling. Recovered on the Derwent, near Cocker mouth, Cumberland, on August 11th, 1911. Reported by Mr. J. Wilson.

HERRING-GULL (*Larus argentatus*).—B.B., No. 32052, marked by Miss A. C. Jackson at Cromarty Firth, Ross-shire, on July 1st, 1911, as a nestling. Recovered at Campbeltown, Argyllshire, on October 21st, 1911. Reported by Mr. T. F. Broom.

LESSER BLACK-BACKED GULLS (*Larus fuscus*).—B.B., No. 31386, marked by Mr. H. W. Robinson at Foulshaw, Westmorland, on July 1st, 1911, as a nestling. Recovered at Fleetwood, Lancashire, on September 11th, 1911. Reported by Mr. T. Crewdson.

B.B., No. 9070, marked by Lord William Percy at the Farne Islands, Northumberland, on August 6th, 1910, as a nestling. Recovered at Hartlepool, Durham, on October 1st, 1911. Reported by Mr. James Lander.

RETURN OF MARKED SWIFTS TO THEIR BREEDING PLACES.

SOME interesting results of the "ringing" of Swifts have recently appeared in the *Ornithologische Monatsberichte*, 1911, pp. 156, 168. Dr. Thienemann writes that on July 4th and 15th, 1910, Herr A. Gundlach of Neustrelitz, Mecklenburg, marked with rings two old Swifts (*Cypselus apus*) which were breeding in a Starling's nesting-box. At the beginning of July, 1911, the same birds were again found breeding in the same box. Ritter von Tschusi zu Schmidhoffen also states that in 1909 he succeeded in "ringing" a female Swift which was breeding under the eaves of a Starling's box, but failed to mark the male bird. In 1910 the "ringed" hen returned to the nesting place, and this time the male bird was also marked. On capturing the birds this season (1911), it was found that both male and female were the birds which had been marked in 1909 and 1910 respectively. One result of these observations is to show clearly that the rings have no injurious effect on the birds, for the female Swift "ringed" by Ritter von Tschusi has now worn the ring for three seasons without any ill effect. It would seem from these records that the Swift is a life-paired bird, returning to the same nesting place year after year.

F. C. R. JOURDAIN.

THREE BROODS OF BLACKBIRDS REARED IN ONE NEST.

IN the October number of *BRITISH BIRDS* (*antea*, p. 143) appears a note of a pair of Blackbirds (*Turdus merula*) rearing three broods of young in the same nest, from which it seems that there is only a single record known of such an occurrence having taken place in England. It will be of interest, therefore, to note that in the spring of 1907 I knew of a case at Troutsdale Mill, near Scarborough, Yorkshire, where a pair of Blackbirds reared three broods of five, four, and three respectively from the same nest. The last brood left the nest on July 28th, and the old birds immediately set about repairing and re-lining it, presumably with a view to a fourth family, but unfortunately the nest was discovered and destroyed by some lads before the eggs were deposited.

W. J. CLARKE.

NESTING OF THE GREY WAGTAIL FAR FROM WATER.

REFERRING to the Rev. F. C. R. Jourdain's note (*antea*, p. 133) on the nesting of the Grey Wagtail (*Motacilla melanope*), I found, on June 15th, 1911, at Sandymount, Tipperary, Ireland,

a nest of this species built in ivy near the top of a wall and about seven feet from the ground ; the wall formed the back of a stable yard, and would be 350 to 400 yards from the nearest water. The nest contained seven eggs.

HERBERT MASSEY.

A PAIR OF ROBINS BUILDING MANY NESTS.

THE incident described and illustrated by Mr. J. H. Owen (*antea*, p. 132) is almost paralleled by another which occurred also near Oswestry at the same time. In the workshop of Mr. W. D. Dovaston at West Felton, near Oswestry, is a double row of pigeon-holes for nails, etc., eight in each row. A pair of Robins (*Erithacus rubecula*) began to build in these pigeon-holes early in March, and continued at work for over a month. They occupied twelve out of the sixteen pigeon-holes, six in each row, with more or less complete nests, as if uncertain which to use. Finally they selected the second from the right in the lower row, completing and lining the nest, laying eggs, and successfully rearing a brood in it.

H. E. FORREST.

HAWFINCHES ADAPTING A NEST OF THE SONG-THRUSH.

THERE has just come under my notice an interesting instance of a pair of Hawfinches (*Coccothraustes vulgaris*) taking possession of a nest of the Song-Thrush (*Turdus musicus*). On October 4th, 1911, I received the following communication from Mr. Cecil Martin, Lindors, St. Briavels, Gloucestershire : "I am forwarding you the curious Hawfinch's nest mentioned in my last letter. This nest I took from a pear tree in an orchard here. It contained four eggs (enclosed), and I saw both the birds. The nest appears to be that of a Mistle-Thrush, or perhaps a Song-Thrush. Note, however, the black horsehairs woven into the lining by the Hawfinches. I am also sending you a normal nest."

I examined the two nests in question, and found the adapted nest was that of a Song-Thrush ; the mud-lining had been quite completed, and the owners had then either deserted it or had been driven away by the Hawfinches, which had then added a further lining to the inside of the Thrushes' nest, consisting of closely woven, fine, dry grass mixed with black horsehair, and exactly similar to the lining of the normal nest. I have not previously heard of a similar instance in the case of Hawfinches.

SYDNEY H. SMITH.

SLENDER-BILLED NUTCRACKER IN BUCKINGHAMSHIRE.

ON October 7th, 1911, I had a male Nutcracker brought me in the flesh. It was killed in a horse-chestnut tree that morning at the village of Whitchurch, about four miles from Aylesbury. I was told that it was seen in the same tree on the previous day, and was very tame. It was in good condition (quite fat). I fancy this is the first recorded instance of the occurrence of a Nutcracker in this county. It is being mounted for the Bucks. County Museum, Aylesbury.

Subsequently I submitted the bird to Dr. Hartert for examination and he pronounced it to be a specimen of the Siberian race (*Nucifraga caryocatactes macrorhynchus*). Dr. Hartert informs me that by the same post as my letter he had one from a friend in Germany, who stated that Nutcrackers had arrived in his district and that we might expect them in England.

EDWIN HOLLIS.

HOOPOES IN MERIONETH AND SHROPSHIRE.

ON August 7th, 1911, a Hoopoe (*Upupa epops*) was seen at close-quarters on the hillside above Aberdovey by Mr. Wm. Beattie of London, who knows the bird well, having found it breeding in France. He also tells me that he saw another at Astley Abbots, near Bridgnorth, one day late in August, 1909. In my *Fauna of North Wales* (p. 204), only one previous record in Merioneth is given, so the above is worth publishing. Over a dozen previous examples have been noted in Shropshire.

H. E. FORREST.

LATE DATE FOR A CUCKOO'S EGG.

IT might be of some interest to record a late date for the egg of the Cuckoo (*Cuculus canorus*) from east Norfolk, although the case has been already published in *Country Life* by Mr. S. H. Lowe, who wrote as follows: "I have been looking through the diary of a Norfolk gamekeeper, and, under the date of July 19th last, he states he found a Cuckoo's egg in a Hedge-Sparrow's nest," etc.

As I know that the keeper, F. Forsdick, is an unusually intelligent observer, I asked Mr. Lowe for definite particulars, and he has forwarded me the following letter, signed by Forsdick:—

"The Cuckoo's egg I found was perfectly" [? almost] "fresh, and had been sat on a few days only. There were three Hedge-Sparrow's eggs and the Cuckoo's in the nest,

and another egg of the Sparrow just outside. We had young Cuckoos flying about till the last few days in August, and the old birds were with us till late July."

CLIFFORD BORRER.

[Curiously enough the date as given above coincides exactly with the latest date mentioned by Mr. G. D. Rowley in the *Ibis*, 1865 (p. 178), where he mentions a Meadow-Pipit's nest with a small Cuckoo's egg taken near Brighton on July 19th, 1864. One or two other cases of Cuckoos' eggs taken in early July are also on record.—F.C.R.J.]

SPOTTED CRAKE IN WARWICKSHIRE.

ON September 9th, 1911, a Spotted Crake (*Porzana maruetta*) was picked up near Hampton-in-Arden, Warwickshire, having been killed by striking the telegraph wires; it was sent for preservation to Messrs. Spicer & Sons, Birmingham, at whose shop I examined it. It proved to be a male, and judging by the dirty-white throat, was immature.

Mr. R. F. Tomes (*Vict. Hist. Warwick.*, p. 203) says: "Though not absolutely rare in the county, this species is by no means common." I am, however, not aware of any published record of its occurrence since the publication of this statement in 1904.

A. GEOFFREY LEIGH.

WATER-RAILS AS MIGRANTS.

It has long been a moot point with ornithologists whether the Water-Rail (*Rallus aquaticus*) is actually more numerous here in winter than in summer, or only apparently so. Many observers hold that the latter is the case, the bird being more easily seen in winter on account of the lack of "cover" at that season. Some light is shed upon the problem by certain records in the recently issued report of the British Ornithologists' Club Committee on the Migration of Birds in the spring of 1910 and autumn of 1909. The observations to which I would call special attention were made at Bardsey Island Lighthouse at the south extremity of Carnarvonshire. Water-Rails were noted here in small numbers on the nights of September 15th and 27th, 1909, but these may have been local birds, since no decided migratory movement seemed to be in progress at that time. On the night of November 4th and 5th, many birds passed the light about midnight, including six Water-Rails, travelling southwards, i.e. away from land. On the following night there was a tremendous rush of migrants going southwards, including many Water-Rails: "About 2,600 Blackbirds, Redwings, Song-Thrushes, and Starlings,

50 Water-Rails, 16 Common and Jack Snipe, 5 Fieldfares, 2 Woodcocks, a Lapwing and a Ringed Plover, were killed " by striking the lantern. This certainly seems to indicate that the Water-Rail migrates southwards in considerable numbers on the approach of winter, so that the apparent increase in numbers observed in England at that season may be real, and be due to immigration from further north.

H. E. FORREST.

[It is quite evident from the records in the different volumes of the Migration Reports that the Water-Rail, occasionally at any rate, performs its migratory movements in flocks of what must be considered for the species as considerable numbers, and sometimes, as in the instance referred to by Mr. Forrest, in really very large numbers. Without drawing any conclusions as to the movements themselves, the material at present hardly being sufficient to warrant it, it is nevertheless obvious that they are in autumn of considerable magnitude, and cover a lengthy period of time, so that it would possibly be nearer the truth to say that it is during this period, say from mid-September to early December, that the numbers in this country are at their maximum. It is unfortunate that with such a skulking species as the Water-Rail, practically the only evidence of its migratory movements is obtainable from the Lights, and consequently positive ones only are of any value, and these must be collected over a considerable number of years before anything conclusive can be deduced from them.—N.F.T.]

GREY PHALAROPE IN SHROPSHIRE.

AN adult male of the Grey Phalarope (*Phalaropus fulicarius*) was obtained about five miles north of Shrewsbury on October 3rd, 1911. It was in full winter plumage. H. E. FORREST.

BLUE EGGS OF COMMON TERN.

THE Common Terns (*Sterna fluviatilis*) that breed in some numbers at a particular spot in north Norfolk, have shown a remarkable tendency to lay pale blue, unspotted eggs this year, and it would be of interest to know if the same has been noticed at other resorts. I have seen four sets of three eggs each, whilst a far larger number containing a single egg of this rather unusual type, were noticed by the local men in this one colony. The Rev. F. C. R. Jourdain, to whom I wrote, suggested that continued plundering of the nests would account in some degree for the paucity of coloration; but in this case another explanation must be sought, as the Terns are carefully protected.

A few pairs of Lesser Terns breed at the same spot, and at least one instance of this same phase occurred in *Sterna minuta*.

CLIFFORD BORRER.

INCREASE OF GREAT BLACK-BACKED GULLS IN IRELAND.

IN connexion with the cases cited (*antea*, p. 140) in which the Great Black-backed Gull (*Larus marinus*) has bred on inland lakes, I may mention that the increase of this species on the Irish coast is most remarkable. I have been twice round the Mayo coast during the past summer, and found the Great Black-backed Gull everywhere a common bird. On the Bills of Achill, Messrs. Praeger and Welch estimated last year, 1910, that they found one hundred pairs, while twenty years earlier, when I visited the Bills, I computed them at fifty pairs. Their increase on the coasts of Waterford and Wexford is also remarkable, quite a considerable number breeding on an island where about three pairs bred thirty years ago. On the sands off Dungarvan Bay I usually see several of these birds where they used to be quite scarce and remarkable.

R. J. USSHER.

ARCTIC AND POMATORHINE SKUAS AND SABINE'S GULLS IN YORKSHIRE.

THE Yorkshire coast has recently been visited by one of those interesting irruptions of Skuas which occur at intervals, and are accounted for by severe storms driving the birds in-shore during their autumnal migration (*cf.*, *Birds of Yorks.*, Vol. II., p. 699). On September 30th, 1911, a gale from the north-east suddenly sprang up about six o'clock, continuing to blow strongly all the morning, and accompanied by heavy rain-squalls. Between 9 a.m. and 1 p.m. numbers of Skuas, both Arctic (*Stercorarius crepidatus*) and Pomatorhine (*S. pomatorhinus*), estimated at about two hundred, in parties of from five to twelve, were observed flying north-westward, low down, along the shore, and crossing the breakwater into the Teemouth. In the afternoon the wind veered to north-west, and although the flight continued, it was less pronounced than in the morning, and the birds kept outside the breakers. Those that were identified were all mature individuals.

During the storm on the morning of September 30th, two immature Sabine's Gulls (*Xema sabinii*) were seen sitting on the sands, and in the afternoon a Grey Phalarope (*Phalaropus fulicarius*) and another Sabine's Gull were reported.

T. H. NELSON.

FORK-TAILED PETRELS IN NORTH WALES.

ON September 30th, 1911, I saw a solitary Leach's Fork-tailed Petrel (*Oceanodroma leucorhoa*) pass along at the foot of one of the cliffs of the Great Orme's Head, from which, with my binoculars, I could see the forked tail, the white rump, and also the reddish-brown wing-coverts, which almost converged at a point above the rump. The wind at the time was blowing strongly from the north. Apparently this constitutes the second instance of the occurrence of this bird off the north coast of Carnarvonshire. R. W. JONES.

ON October 6th, 1911, a male Fork-tailed Petrel (*Oceanodroma leucorhoa*) was picked up at Newtown, Montgomeryshire, and sent for preservation to Shrewsbury, where I examined it. A strong northerly wind was blowing, which accounts for its occurrence so far inland. This is the first example of the species obtained in Montgomeryshire, although several have been recorded close to the border in Shropshire.

H. E. FORREST.

CONTINENTAL ROBIN IN SOUTH-WEST SCOTLAND.—A specimen of *Erithacus r. rubecula* is recorded by Miss A. C. Jackson (*Ann. Scot. Nat. Hist.*, 1911, p. 245) as taken at the Mull of Galloway Lighthouse on November 2nd, 1910.

NORTHERN GREAT SPOTTED WOODPECKERS IN SCOTLAND.—A specimen of *Dendrocopos m. major* is recorded by Miss A. C. Jackson (*Ann. Scot. Nat. Hist.*, 1911, p. 246) from near Dingwall in October, 1909. Another example of this form is recorded by Miss D. Hamilton (*l.c.*, p. 183) from near Sauchen, Aberdeenshire in December, 1909. With these should be compared other records for the autumn of 1909, in Volume IV., pp. 286 and 369.

WOOD-SANDPIPER IN FIFESHIRE.—Mr. W. Berry records (*Ann. Scot. Nat. Hist.*, 1911, p. 248) that he noticed, and his companion secured, a female example of *Totanus glareola* on August 1st, 1911, at the Morton Lochs near Tentsmuir, Fifeshire. The Wood-Sandpiper has seldom been noticed in Scotland, the last record being of one in Fair Isle in 1908.

BREEDING OF THE GREAT BLACK-BACKED GULL INLAND IN IRELAND.—With reference to the notes published under this heading in our last issue (pp. 140-1), Mr. J. Steele Elliott announces (*Zool.*, 1911, p. 388) that he has seen nests of this species on the islands of Lough Aderry and Lough Derryduff, situated between Ardara and Naran in Donegal, and at least in one year on Lough Doon.



REVIEWS



A Fauna of the Tweed Area. By A. H. Evans. Pp. 262 + xxviii. 21 Plates and a Map. (Edinburgh: David Douglas.) 30s.

THIS is the twelfth volume of Mr. Harvie-Brown's *Vertebrate Fauna of Scotland*. The Tweed Area covers the counties of Berwick, Roxburgh, Selkirk and Peebles, and penetrates to a small extent into East Lothian and Mid Lothian, while it takes in the north-eastern corner of Northumberland, including Holy Island and the Farne Isles.

Following a bibliography Mr. Evans gives a good account of the physical features of this region, and then proceeds to a detailed discussion of its vertebrate fauna with the exception of the FISHES, which are to be treated with those of the Forth Area in the volume on that region promised by Mr. W. Evans. We are here concerned with the BIRDS, which occupy a large portion (pp. 52-246) of the book; but we must not fail to note, in passing, the extraordinary and conspicuous omission of the Rabbit from the Mammals.

Mr. Evans's account of the birds is, with some important exceptions to be referred to later, on the whole a satisfactory piece of work, and though we could have wished for evidence of more personal observation than is given, the gathering together of the published records has been done with great care and discrimination. It is somewhat curious that Mr. G. Bolam, who is so very frequently quoted in this volume, and who has no doubt done more observation than anyone else in the area, should himself be writing a book, which we understand is now in the press.

The Tweed area is a somewhat important one for the reason that within or near its limits the northernmost point of the ranges of several species in Great Britain was reached until comparatively recent times, while in the case of at least one bird—the Eider—the Farne Isles provide its most southerly breeding place at the present time. To the necessity of carefully reviewing the history of the status of such birds the author has been alive, and his careful historical accounts of the Hawfinch, Great Spotted Woodpecker, Stock-Dove, and other birds from this point of view are excellent. Mr. Evans is, however, stretching a point we think in considering (p. xv.) the Red-backed Shrike, Nuthatch, Nightingale and Wryneck as “here approximately at the northernmost

point of their range in the United Kingdom," if by this he means their normal breeding-range, which we should put considerably to the southward. In this category Mr. Evans has greatly disappointed in one important bird—the Willow-Tit. Although he has one positive record from Mr. W. Evans of the occurrence of this bird in the area, yet he heads the article *Parus dresseri*, and does not admit the Willow-Tit, although he acknowledges its distinction. This seems inconsistent, and in fact he brings no evidence to show that the Marsh-Tit has ever occurred in the area. The Marsh or Willow-Tit is, however, common and possibly both occur; this is the very region from which we require information, and it would surely have been an easy matter for Mr. Evans to have procured specimens from different localities, and made some attempt to define the status of these interesting birds.

Some points of detail which we have noted, and some recent records which have not appeared in our pages, may be here mentioned seriatim. Only one Black Redstart and no Blue-throat is recorded. The Lesser Whitethroat is noted on Mr. G. Bolam's authority as possibly breeding at Berwick in 1902 and 1904. The Grasshopper-Warbler is said to be commoner than might be supposed from the account in "Yarrell." The breeding of the Nuthatch near Ednam (Roxburgh) in 1850, is considered authentic. The Yellow Wagtail is not recorded as breeding, and appears to be uncommon even as a migrant. In a very full account of the Pied Flycatcher it is a pity that records undoubtedly due to passage-migrants have not been kept altogether separate from breeding records; amongst the latter that of a nest and eggs found near Hawick (Roxburgh) on May 18th, 1901 (*Ann. Scot. Nat. Hist.*, 1902, p. 79), seems to have escaped the author's notice. A Green Woodpecker is recorded from Linhope in the autumn of 1903. The Buzzard does not now breed. The Honey-Buzzard is considered the commonest Buzzard visiting the area, and was recorded as breeding in 1897, by Mr. Bolam (*cf. supra*, p. 85). The Hobby has not been proved to nest. A Night-Heron was taken in Holy Island about 1908, a Little Bittern near Eyemouth (Berwick), on May 18th, 1904, and a Spoonbill at Holy Island shortly prior to December, 1908. There are only two positive records of the occurrence of the Grey Lag Goose! Mr. Evans says that the Eider bred on the Coquets in Selby's time, "but seems to have vanished thence when the lighthouse was erected in 1841." But Mr. Jourdain informs us that in 1856 Salvin took eggs there which are now in the British Museum. The

claim that the Turtle-Dove is extending its range northward is hardly justified by the records of its occurrence for this area, since only two are given for the last twenty years, and Mr. Evans's statement that "there can be little doubt that it is beginning to breed in our district," is not justified by the evidence adduced. The Red-legged Partridge should have been placed within square brackets, in our opinion, since it only gains a precarious place by reason of recent introductions into the area. Mr. Evans calls the Wood-Sandpiper a rare summer visitor, presumably because it has once (in 1853) nested in the area. It should have been called a vagrant. The statement in the footnote (p. 210) attributed to Mr. W. Evans, that these birds "not uncommonly remain with us for the whole summer," should perhaps refer to the Green Sandpiper, for the Wood-Sandpiper has very rarely been recorded in any part of Scotland, even as a straggler. The Great Crested Grebe has not yet been recorded as breeding. The date of the White-billed Northern Diver obtained by Mr. Abel Chapman at Holy Island is given correctly as January, 1879, and not January, 1907, as stated in our Volume I., p. 295.

In two important particulars Mr. Evans's work must be deemed unsatisfactory to modern requirements, and much that *must* be done has been left undone, and might have been at all events begun by the author of this volume. We refer to the want of exact information regarding (1) migration as observed in the area and (2) the occurrence of continental forms.

The important subject of Migration is neither treated separately in the Introduction, nor has much trouble been taken to give accounts of the movements of each species. For examples, we are told of the Song-Thrush, "Emigration takes place, to some extent, for the winter, and the number of individuals in the district may vary considerably with the influx of others from abroad." Of the Robin, that "About September our native stock is said to be augmented by immigrants, which remain with us during the cold season." Again, "Starlings are well known to be to a considerable extent migratory, and flocks often arrive on the coast in autumn." Such indefinite statements are really quite useless, and might have been made without any special local knowledge. It is surprising that they should appear in such a form in an important fauna. In the accounts of such easily observed birds as the Swallow, Martin, and Sand-Martin, we are only told when they arrive and when they depart, no mention being made of passage through the area. There is

indeed nothing of importance to be gleaned from the book by the student of migration.

With regard to the occurrence of continental forms and their important bearing upon migrational movements, Mr. Evans is much behind the times. Since he calls the Marsh-Tit *Parus dresseri* we may presume that he recognizes that the British form is distinct from *Parus p. palustris*, and this being so, there is no reason why he should not recognize the distinctions of many other British forms. He does not even mention the existence of the Continental Song-Thrush, Robin, and Goldcrest, all of which must have occurred in this region. He recognizes that the British Great Spotted Woodpecker is distinct from the Scandinavian, but he dismisses the question of "passing visitors" without giving any details or saying whether he has examined any of them or not! The importance of modern methods of close work seems to be only just dawning on some of our ornithologists, and that Mr. Evans has fallen back from the point reached in recent avifaunas can only be regretted by those who look at the future rather than the past.

In conclusion, we must say a word as to the excellence of the production of this volume, which is in the same good style as the previous ones, although it seems a pity, on the score of uniformity, that a different kind of paper should have been used. The series of plates from excellent photographs by Mr. W. Norrie, gives one an admirable idea of the region and its bird-haunts, although some of the prints are rather lacking in firmness: the map is everything that could be desired.

H.F.W.

Report on the Immigrations of Summer Residents in the Spring of 1910: also Notes on the Migratory Movements and Records received from Lighthouses and Light-vessels during the Autumn of 1909. By the Committee appointed by the British Ornithologists' Club. (Forming Vol. XXVIII. Bull. B.O.C.). 21 Maps. Witherby & Co. 6s.

THIS is the sixth annual Report of the Committee, and is in the same form as previous issues, except that the observations on "unscheduled" birds and the autumn records have in many cases been condensed and connected. This has resulted not only in a saving of space, but has made these parts of the Report much more interesting and valuable, the autumn records being especially so. The arrival of migrants in the spring of 1910 appears to have been fairly normal, though it is noted that a few species were unusually late, and notably the Spotted Flycatcher, "the main body of which

did not arrive until June, while in some places Sedge-Warblers had not reached their breeding-haunts by the 13th of May."

Amongst items of interest not hitherto recorded in our pages, we may note the following: Two Ring-Ouzels (*Turdus torquatus*) in south Devon in February, 1910. Chiffchaffs were again reported as seen all through the winter in Cornwall. A Wryneck (*Iynx torquilla*) in Cornwall on March 26th (an early date, but we see no good reason for the suggestion that it might have wintered there, especially as a single bird was recorded for Hampshire on March 14th), and another on Lundy Island on the night of May 9-10th. The Land-Rail (*Crex pratensis*) was again practically unrecorded from the south-eastern counties. Shore-Larks (*Otocorys alpestris*) were first noticed in S.E. Suffolk on November 11th, 1909, and were still present there on April 13th, 1910 (they have been noted as late as April 22nd). A young male Aquatic Warbler (*Acrocephalus aquaticus*) was taken at St. Catherine's Lighthouse, Isle of Wight, on the night of September 17-18th, 1909, this being the second example recorded from that place (*cf.* Vol. I., p. 85). A male Firecrest (*Regulus ignicapillus*) was taken at the same Light at midnight, on October 17th, 1909. A single Gadwall (*Anas strepera*) is recorded from Hazelbeach, Northamptonshire, on July 27th, 1909. Continental Song-Thrushes (*Turdus m. musicus*) are recorded from the Dorset and Isle of Wight Lights during the first ten days of April, 1910, with British Song-Thrushes, and between September 18th and 30th, 1909, on the Yorkshire coast, September 28th at the Isle of May, and September 22nd and 23rd on the north Norfolk coast. A Continental Robin (*Erithacus r. rubecula*) is recorded at St. Catherine's on April 8th, 1910, others from the Yorkshire coast from September 17th to October 8th, 1909, and at St. Catherine's on December 11th. Continental Goldcrests (*Regulus c. cristatus*) are noted on the Yorkshire coast between October 19th and November 2nd, 1909. (With these records *cf.* Vol. IV., pp. 245-6.)

The determination of the Committee to carry on the inquiry for at least ten years (p. 9), will be applauded by all those who have studied migration in the field. It soon becomes evident to the observer that, however careful and painstaking he may be, he can only see a fraction of what is really going on, and for that fraction he is dependent on many varying natural conditions. Thus only a series of observations over a number of years can bring any true results.

H.F.W.



BLACK-THROATED DIVER.

On arriving at the nest she brought a piece of dried grass and held this in her beak for over an hour. As incubation proceeds, a very few tufts or stalks of grass are placed around the eggs.

(*Photographed by O. G. Pike.*)

BRITISH BIRDS

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ASSISTED BY

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PHOTOGRAPHING THE BLACK-THROATED DIVER AND GREY LAG-GOOSE.

BY

OLIVER G. PIKE, F.R.P.S., F.Z.S.

(PLATE 3)

ABOUT the middle of last May, I journeyed to the Outer Hebrides for the purpose of photographing those two rare nesting birds, the Black-throated Diver (*Colymbus arcticus*) and the Grey Lag-Goose (*Anser cinereus*). Although I knew the best spot to go to for my purpose, I was on the island for a whole week before I was able to expose a plate. The few pairs of Divers had only just commenced to lay, and in consequence were rather wild, and would not remain on their eggs for long, and in three of the nests of the Grey Lag-Goose that I found the eggs had hatched, another had been robbed by a Crow, and the fifth was not in an easy place for photography. However, as it seemed to be the only one left, I set to work to photograph the bird, but knew that I should have a difficult task. There was only one place where I could make a hiding-place, and for the best part of the day the sun would be shining right into my lens. I dug a hole in the peat, about four feet deep, placed my bird-watching tent over this, and covered the whole with heather, and going inside waited for two hours. As there was no sign of the bird returning, I went away, and while the Goose was getting used to the pile of heather by her nest, I went to another island on the large loch, and built a hiding-place from which I hoped to photograph the Diver. The building of this was rather a long task, for we had to construct the shelter of rocks and stones, and it had to be built out in the water, as that was the only place where I could obtain a good view of the bird. At length my two hiding-places were completed, and it resolved itself into a game of patience between the birds and myself. I make it a rule never to keep a bird off its eggs for more than two

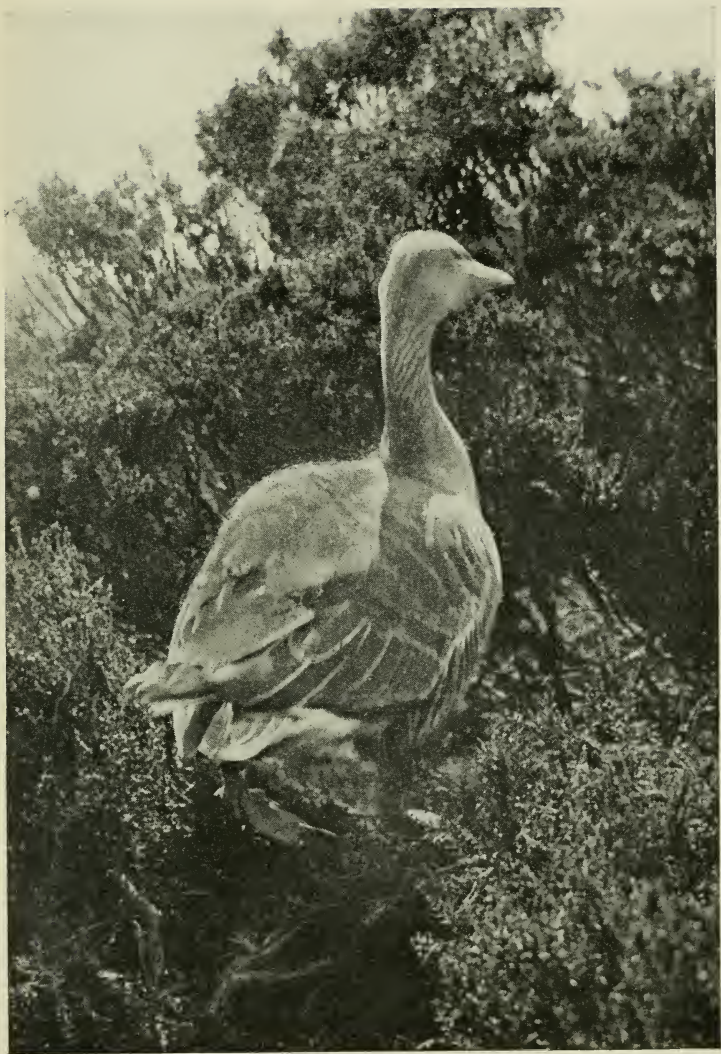


FIG. 1.—GREY LAG-GOOSE STANDING IN FRONT OF HER NEST.
(*Photographed by O. G. Pike.*)

hours if it does not show signs of turning up, for if a bird does not return in that time there must be something wrong with the shelter in which you are hiding.

I entered my small stone-house and waited, but although the Diver came to within a few yards of its nest it would not go to its eggs, and when two hours had passed I gave up for that day. The next morning I went to the small island on which the Goose had her nest, as I was anxious to get a photograph of her before the eggs hatched. The keeper and a friend went with me, and when I was carefully hidden away under the heap of heather, they left me. After I had been waiting for a little over an hour, I almost gave up hope of the Goose returning, as I had had no sign of her, but just then I heard a splashing in the water below, and the familiar call, "wonk-wonk, kee-e-e, wonk," told me that my bird had arrived. For almost another hour she remained down in the water, twenty feet below me, and although I could not see her, I judged by the noise that her mate was with her. Then the noise ceased, and I heard the measured footsteps of the bird as she slowly made her way through the heather. At last she reached my hiding-place, and then stopped and remained still for ten minutes. There she was, only a few inches from me, and just behind my back. I hardly dared breathe, for I knew that the slightest sound would scare her away. She now seemed to show a certain amount of reasoning, for she had got quite used to the pile of heather, and had returned to her nest since this heap had been erected : but she knew that there was something strange there, and very slowly walked round my hiding-place and carefully peered through the heather, taking just an hour to do this. It spoke well for the way the keeper had hidden me, for her keen eyes did not penetrate through the covering. Once I thought she had "spotted" me, for she remained with her head down, looking straight at me for quite a long time. The only sound seemed to be the beating of

my heart, and in my excitement I wondered if she would hear that, for there are few things quite so exciting or fascinating to a bird-lover as to be so near to a fine bird like the Grey Lag-Goose. After she had circled my shelter, she walked slowly off towards her nest, and even then kept stopping and looking back as if she were



FIG. 2.—THE NEST OF THE GREY LAG-GOOSE WITH THE EGGS UNCOVERED.

(Photographed by O. G. Pike.)

still suspicious. When she reached her nest she began to uncover the eggs, and place the thick covering of down around the edge. The sun by this time had worked round and threw a shadow of the bird's long neck down her back, and it was almost shining in my lens : I knew I only had a few moments left in which it would be possible to make an exposure, so I released the shutter and secured a negative of her standing by the side of

the nest, and then quickly changed my plate. As soon as I had done this, she became restless, and I made another exposure, and then for no reason that I could discover she jumped up and flew away. Something



FIG. 3.—THE BLACK-THROATED DIVER SETTLING DOWN.

(*Photographed by O. G. Pike.*)

had alarmed her, and I knew it was no good waiting longer, and for all my trouble I only secured these two negatives.

There were not many pairs of Geese on this western island, although it seemed to be an ideal place for nesting. The loch which contained the island on which I found the nest, had over three hundred islands on it, and many of these were covered with tall heather, just

the places that Geese delight in, but there seemed to be very few birds about. Three pairs had hatched out and had taken their young down to the water, but it was impossible to get near the young, for before we had got to within three hundred yards of them, the parents led them away.

I was more successful with the Black-throated Diver. I found out that on my first attempt to photograph it, the bird could see me through the crevices in my stone hut, so I stuffed up all the holes with moss and heather, and very soon after I got inside, on my second attempt, the bird was back. I was ready to begin photography at 7.30 in the morning, and the keeper then rowed away and left me alone, and was coming back for me at 4 o'clock in the afternoon, so I was in for a fairly long day. Ten minutes after he had left, I heard the Diver splashing outside, and peering through my small peep-hole I saw her shuffling towards her nest. When the Diver attempts to travel on land, it has a curious action. It lifts its body up, seems to throw itself forward on to its breast, then pushes its feet forward and again lifts its body, and shuffles along in this manner. Owing to its difficulty of moving on land, the nest is close to the water, and the bird usually has a well-trodden pathway leading from the water to the nest, or rather to the depression in the ground containing the eggs, for there is seldom any serious attempt at nest-building. I have seen quite a good nest made by the Red-throated Diver, but the three or four nests of the Black-throated Diver that I have seen, have been just depressions in the ground.

The bird before me was absolutely unconscious of any danger, and it was really beautiful to watch her, as she settled down upon her two eggs. At first she could not get comfortable and moved about, and I exposed a good many plates, but when she eventually settled, it seemed almost impossible to move her. I had exposed about twenty plates, and thought I would like her to leave her eggs, hoping that I might get some

photographs of her in different positions when she returned. I tried talking to her, but this did not have the effect of making her leave, and it was not until I shouted that she left. But she only went a few



FIG. 4.—LISTENING TO THE PHOTOGRAPHER'S REMARKS.

(Photographed by O. G. Pike.)

feet away, and then returned, but sat in the same position. I waited several hours with that fine bird six feet away from me, just watching her and waiting for something to happen, for I have often noticed when photographing birds, that if you wait and let the female get well settled on her nest, the male will appear. I was hoping that this would occur, but although he came to within a few yards of my shelter, he would not come to the nest,

and I had to be content with what pictures I had secured, for the sitting bird refused to change her position, and lowering her long neck and half closing her eyes, settled down for the day.

On this large loch there were only two pairs of Black-throated Divers, and we did not discover the other nest. I should have liked to have spent more time amongst these birds, but the nesting season is so short ; and as I had decided to spend the whole of the summer in trying to secure the life-history of the Cuckoo in photographs, I had to hurry south.

NOTES

RECOVERY OF MARKED BIRDS.

REDBREAST (*Erithacus rubecula*).—B.B., No. A990, marked by Mr. A. Bankes at Salisbury, Wiltshire, on July 22nd, 1911, as an adult. Recovered at the same place on November 4th, 1911, and re-marked with the same ring.

HEDGE-SPARROW (*Accentor modularis*).—B.B., No. A989, marked as No. A990 on July 27th, 1911. Recovered at the same place on November 16th, 1911, and re-marked with the same ring.

LINNETS (*Linota cannabina*).—B.B., No. D226, marked by Mr. A. G. Leigh at Hampton in Arden, Warwickshire, on May 26th, 1911, as a nestling. Recovered in Medoc, near Bordeaux, Gironde, France, on October 25th, 1911. Reported by M. E. Rousse.

B.B. No. C624, marked by Mr. N. H. Joy at Bradfield, near Reading, Berkshire, on June 6th, 1911, as a nestling. Recovered at Sabres, Landes, France, on October 25th, 1911. Reported by M. J. Cassagne.

SPARROW-HAWKS (*Accipiter nisus*).—B.B., No. 10308, marked by Mr. E. A. Wallis at Rubery, Warwickshire, on July 3rd, 1911, as a nestling. Recovered at Chaddesley-Corbett, near Kidderminster, Worcestershire, on October 25th, 1911. Reported by Mr. J. Steele Elliott.

B.B., No. 10310, marked as No. 10308 (same brood). Recovered at Bromsgrove, Worcestershire, on November 14th, 1911. Reported by Mr. E. Phillips.

CORMORANT (*Phalacrocorax carbo*).—B.B., No. 8941, marked by Mr. R. M. Barrington at Saltee Island, co. Wexford, on June 26th, 1910, as a nestling. Recovered at Audierne, Finistère, France, on November 16th, 1911. Reported by M. Emile Caroff.

COMMON HERON (*Ardea cinerea*).—B.B., No. 50083, marked by Mr. G. T. Atchison at Harbottle, Northumberland, on April 4th, 1911, as a nestling. Recovered near Belford, Northumberland, the first week in November, 1911. Reported by Mr. J. E. Harting.

WOODCOCK (*Scolopax rusticula*).—B.B., No. 12611, marked by Mr. T. Pattison (per Mr. M. Portal) near Carlisle, Cumberland, on May 15th, 1911, as a nestling. Recovered at

Newtown, co. Galway, on October 31st, 1911. Reported by Mr. R. O. Harrison.

B.B., No. 12603, marked as No. 12611, on May 11th, 1911. Recovered at Longtown, Cumberland, on November 22nd, 1911. Reported by Mr. J. W. Makant.

BB., No. 12099, marked as No. 12611 on May 14th, 1911, by Mr. Davidson per Mr. M. Portal. Recovered at Ecclefechan, Dumfriesshire, on November 25th, 1911. Reported by J. E. Johnson-Ferguson.

COMMON SNIPE (*Gallinago cæ'estis*).—B.B., No. 14164, marked by Mr. R. E. Knowles on the east Cheshire Hills, on May 31st, 1911, as a fledgling. Recovered at Blythebridge, near Stoke-on-Trent, Staffordshire, on November 18th, 1911. Reported by Mr. F. G. Mather.

COMMON TERNS (*Sterna fluviatilis*).—B.B., No. 10298, marked by Mr. W. I. Beaumont at Carn Skerries, Summer Isles, Ross-shire, on August 5th, 1911, as a nestling. Recovered fifteen miles south of Oporto, Portugal, at the beginning of October, 1911. Reported by Mr. W. C. Tait.

B.B., No. 12530, marked by Mr. R. O. Blyth at Loch Thom, Renfrewshire, on July 22nd, 1911, as a nestling. Recovered near Aveiro, Portugal, on October 11th, 1911. Reported by Mr. J. D. Pereira da Graca and Mr. W. C. Tait.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 22585, marked by Major H. Trevelyan on Gull Island, Lower Lough Erne, co. Fermanagh, on June 15th, 1911, as a nestling. Recovered at Lisnaskea, co. Fermanagh, on October 20th, 1911. Reported by the *Belfast Evening Telegraph*.

B.B., No. 30388, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 11th, 1910, as a nestling. Recovered near Wigton, Cumberland, on November 4th, 1911. Reported by Mr. R. S. Wilson.

COMMON GULL (*Larus canus*).—B.B., No. 22058, marked by Mr. W. I. Beaumont at Eil Beg, Dunstaffnage, Argyllshire, on June 29th, 1911, as a nestling. Recovered at St. Mullens, co. Carlow, on November 1st, 1911. Reported by Mr. J. Miller.

MARKED ABROAD AND RECOVERED IN ENGLAND.

STARLING (*Sturnus vulgaris*).—(Viborg No. 204), marked at Viborg, Denmark, by Herr C. C. Mortensen, on October 7th, 1911, as a young bird, was recovered near Shropham, Norfolk, on November 12th, 1911, and reported to us by Mr. B. B. Sapwell.

BLACK-HEADED GULL (*Larus ridibundus*).—(Rossitten No. 5819), marked in Schleswig on June 25th, 1911, was recovered at Breydon, Norfolk, on October 27th, 1911. Reported to us by Dr. C. B. Ticehurst.

ICTERINE WARBLER IN NORFOLK.

A FEMALE Icterine Warbler (*Hypolais icterina*) was shot at Wells, Norfolk, on September 13th, 1911. During the night of September 12–13 there had been a good deal of cloud and some rain, with a north-westerly wind varying in force. The migration was not a large one and consisted, so far as I could see, of Wheatears, Redstarts, and a few Whitethroats.

Mr. Pashley had sent me a wire from Cley on the previous day, September 12th, "Redstarts, Flycatchers on the move," and I had seen a Wheatear, a Whitethroat, and a cock Snow-Bunting in the middle of the day, along the coast at Wells.

FRANK PENROSE.

SUPPOSED REED-WARBLER IN MERIONETH.

THE recorded occurrences of the Reed-Warbler (*Acrocephalus streperus*) in North Wales are so few and scattered, that the following is worth noting. One day in August, 1911, Mr. H. G. Attlee heard the song of the Reed-Warbler issuing from a bed of reeds at Llanvihangel-y-traethau, near Harlech. He heard it only once, and for a short while, but it was at a distance of only a few yards. He is familiar with the songs of the Reed- and Sedge-Warblers, and has no doubt, in his own mind, that it was the former. He has studied the bird-life of that district for several years, but never came across the Reed-Warbler before. The bird may have been only a passing migrant, but there are plenty of reeds suitable for nesting just there. (*cf. Vert. Fauna of N. Wales*, p. 96—occurrence at Barmouth).

H. E. FORREST.

LATE NESTING OF THE GREAT TIT.

ON October 14th, 1911, I happened to be going round my garden at Duddington, Edinburgh, with my dog, when it suddenly made a jump at a shrub. There immediately tumbled out two Great Tits (*Parus major*), newly out of the nest, and unable to fly. One fluttered along the lawn and got safely into the root of a yew tree, and the other I rescued from the dog. The parent birds flew excitedly from branch to branch overhead.

WILLIAM SERLE.

WILLOW-TIT IN WORCESTERSHIRE AND
HEREFORDSHIRE.

DURING the spring and early summer of 1911, I met with Willow-Tits (*P. atricapillus kleinschmidti*) in the parishes of Suckley (Worcestershire), and Acton Beauchamp and Cradley (Herefordshire). They were about as uncommon as they are near Reading.

These observations depend on the note of the bird. I may, however, add that the difference in the head is quite obvious with the aid of binoculars at close range. Further, since my note on this subject (Vol. IV., pp. 146-7), I have read the account of the notes of *P. palustris communis* and *P. atricapillus salicarius* given by Dr. Hartert in his *Die Vögel der paläarktischen Fauna*, and find that they agree precisely with those of the corresponding British forms.

C. J. ALEXANDER.

WHITE WAGTAILS IN AUTUMN IN IRELAND.

IN the spring of 1910 I noticed some White Wagtails (*Motacilla alba*) on the coast of Wexford (Vol. IV., p. 18). This autumn, being in the same place, I saw two small parties of White Wagtails on September 13th (1911), and on the next day either the same or other small flocks. On the same days I saw several flocks of Pied Wagtails, but the White Wagtails kept apart from them. Throughout the rest of September and early October, there were considerable numbers of Pied Wagtails passing through almost every day, in small parties or flocks up to fifty individuals each. All these parties and flocks contained old as well as young birds, and although I will not vouch for the latter, all the old birds I saw were Pied, and I detected no more White Wagtails.

The White Wagtail has very seldom been noticed in Ireland in autumn, but curiously enough Mr. R. Warren has just recorded (*Zool.*, 1911, p. 385) a pair as seen in the last week of August, 1911, by Captain Kirkwood at Bartragh, co. Mayo, where they have been observed every spring for some years, but never before in the autumn.

H. F. WITHERBY.

ALBINISM AND XANTHOCROISM IN THE
PIED WAGTAIL.

ON October 19th, 1911, Messrs. Spicer and Sons of Birmingham, received for preservation a variety of the Pied Wagtail (*Motacilla lugubris*). Mr. Spicer, junr., informs me that it proved, on dissection, to be a male, and through his kindness I was able to examine it when freshly set up, the following

being a description: Forehead, white; crown, French grey, slightly barred with darker grey and tinged with sulphur-yellow; cheeks and upper-sides of neck pale yellow, save for a patch of grey behind the eyes; mantle, back, and rump pale grey tinged with sulphur-yellow; upper tail-coverts very pale grey; tail grey, faintly barred with darker; wing-coverts grey (lesser rather darker) edged with white; primaries and secondaries very pale grey, edged with white; throat white, tinged with yellow; pectoral band grey; lower-breast and abdomen pure white; flanks very pale grey; beak, legs and claws black; culmen .5 in.; wing 3.3 in.; tail 3.0 in.; tarsus 1.0 in. In regarding this bird as an albinistic variety of *M. lugubris*, I have been guided by the fact that, of the European Wagtails of approximately the same length, it comes nearest to the Pied Wagtail in the measurements of the culmen, wing, tail and tarsus (*cf.* Dresser's *Birds of Europe*). Mr. T. Ground, to whose kindness in aiding me in the identification I am much indebted, lent me an adult male in breeding plumage from his collection for comparison, and the dimensions of this specimen were: Culmen .55 in., wing 3.4 in., tail 2.7 in., tarsus .9 in., which agree very closely with those of the variety. In addition to the evidence afforded by measurement, it will be seen that the bird closely resembles the Pied Wagtail in winter plumage, with the replacement of the black and grey coloration by paler shades of grey.

The yellow wash on the cheeks, which corresponds precisely with the white patch in *M. lugubris*, may be due to the specimen being immature (an assumption which is supported by the barring on the crown and tail, and by the sexual organs not being fully developed), but that on the crown, back, and throat seems to be undoubtedly due to xanthocroism—a variation which, in conjunction with albinism, must be most unusual.

A. GEOFFREY LEIGH.

[It might equally well be a specimen of a White Wagtail.—H.F.W.]

FOUR HOUSE-MARTINS FEEDING YOUNG IN ONE NEST.

WITH reference to the note on page 136 of the October number of BRITISH BIRDS, on the breeding of the House-Martin (*Chelidon urbica*), I may record that a pair of these birds reared two broods this year from one nest under the eaves of my house. I noticed the parent birds feeding this second brood on September 17th. On October 1st and 2nd they were still carrying food, but were assisted by two other House-

Martins. On October 3rd the young left the nest and disappeared with the old birds.

In 1906 the same thing occurred. I have a note dated September 18th, 1906, that the old birds were still feeding the young of a second brood, assisted by other Martins. On September 20th, 1906, young and old birds disappeared together.

J. S. T. WALTON.

THE MIGRATION OF SLENDER-BILLED NUTCRACKERS.

IN NORFOLK.

OCTOBER 4th, 1911, was a very still day in Norfolk, and this was succeeded by a boisterous night and a gale from the north-east, which, at 7 a.m. the following morning, was registered by the Meteorological Office as E.N.E., force six, at Yarmouth. On the 6th, my woodman informed me that he had the day before seen a remarkable bird, unknown to him, perched on an oak tree at Hempstead, which he described as brown in colour with a white bar on the tail, and about the size of a Jackdaw. I at once suggested a Nutcracker, and accordingly the same day an example of this uncommon species, presumably the same one, was shot at Cawston, a parish only nine miles further inland, and forwarded to Mr. T. E. Gunn. This showing of the white upon the tail was a feature noticed when my son and I were at the Riffel Alp in Switzerland with Mr. W. H. St. Quintin, in July, 1905, and I am not surprised that it at once attracted my woodman's attention. On the same day (October 5th), and not far from the same place, distant from the sea about two-and-a-half miles, a Hoopoe was seen, and a Scoter was met with near Norwich. In all probability these birds had come in during the night of the gale, as well as the Buckinghamshire Nutcracker, which Mr. Hollis records (p. 167) as having been first seen on the 6th. It has often been remarked how birds of different species come in with the same wind. On the 9th, a second Nutcracker was shot on some low ground at Sparham, which is a very little way from Cawston, by Mr. J. A. Sayer, and has since been offered to the Norwich Museum. This also was sent to Mr. Gunn, who made a careful dissection of the ovaries in both cases, for they were both females. Both these Nutcrackers belong to the slender-billed Siberian race (*Nucifraga c. macrorhynchus*), indicating their eastern origin. In one of them, which was exhibited by the writer to the Norwich Naturalists' Society, the culmen measured 1.9 in., and the upper mandible projected considerably over the lower one.

J. H. GURNEY.

IN SUFFOLK.

WITH reference to the migration of Nutcrackers, I may record that a female was shot on November 11th, 1911, in the parish of Beyton, near Bury St. Edmunds, Suffolk, and brought to me soon afterwards. It is one of the slender-billed form; the man who shot it had seen it about for a week or more, and noticed its resemblance to a Jackdaw.

JULIAN G. TUCK.

ON THE CONTINENT.

IN the pages of our contemporary, the *Ornithologische Monatsberichte*, for 1911, pp. 169 and 185, numerous records of the appearance of the Siberian or Slender-billed race of the Nutcracker (*Nucifraga caryocatactes macrorhynchus* Brehm) in Germany and Upper Austria have recently been published.

The first notice is from F. Tischler, who shot one on September 10th at Losgehnien near Bärtenstein (East Prussia). On September 17th another was obtained about ten kilometres north of Lübeck by W. Blohm. Two specimens (identified as belonging to the thin-billed race) were obtained from a small flock seen in the Sibyllenort Revier, Silesia, by E. Speer, on September 22nd, while two more were shot in the Poggenpohl preserve near Lübeck on the following day (P. Waack). Dr. E. Hesse writes that on September 24th, he met with a single bird near Kuhhorst in Havelländ (Brandenburg). Another was seen on September 26th about ten kilometres south of Mölln i. Lbg., and R. Heyder observed one on October 1st, in an orchard ten kilometres north of Chemnitz (Saxony), while Dr. R. Biedermann-Imhoof saw one fly overhead on October 6th at Eutin (north of Lübeck). Ritter von Tschusi zu Schmidhoffen also reports a strong immigration of Slender-billed Nutcrackers into Upper Austria, but gives no details as yet.

It is too early to draw any conclusions as to the extent of the movement, which seems, however, to be proceeding on a wide base. In all the cases where specimens have been examined, they have proved to belong to the Siberian race.

F. C. R. JOURDAIN.

JAYS IN LONDON.

ON October 3rd, 1911, I observed two Jays (*Garrulus glandarius*), apparently about to alight upon a tall factory-chimney between New Cross and Bermondsey, at a spot about three miles from the centre of London.

I think it may safely be concluded that the birds were passing migrants, as it is hardly to be conceived that a locality exists in the immediate neighbourhood, where such a woodland-loving species is resident, and from which the birds seen may have temporarily wandered. I was travelling by train at the time of the occurrence, and was therefore unable to ascertain in what direction the Jays took their departure.

HOWARD BENTHAM.

NIGHTJAR FREQUENTING A BEEHIVE.

FROM the 16th to 30th September, 1911, a Nightjar (*Caprimulgus europæus*) took up its quarters in the garden of Mr. F. L. Rawlins on the outskirts of Rhyl, a place where this bird is hardly ever seen or heard. It was constantly to be found squatting on the top of a wooden beehive in the full blaze of the sun, frequenting the spot no doubt on account of the warmth, for it did not seem to molest the bees or take any notice of them. By careful stalking I was able to approach within four feet and photograph it as it sat there, motionless with closed eyes.

The last occasion on which the Nightjar was seen was September 30th, when it spent the first few hours of the morning on the ground almost under the hive; as the day got warmer it moved into its old position on the hive.

H. E. FORREST.

ON THE CLIMBING MOVEMENTS OF THE GREAT SPOTTED WOODPECKER.

IN an early number of BRITISH BIRDS (Vol. II., p. 93; cf. also p. 145) a note appeared on the climbing movements of the Green Woodpecker, in which it was stated that "on reaching a sufficient elevation it (the male) would descend backward with as great rapidity as in its ascension." In this connexion it may be of interest to record that on November 12th, 1911, I saw a Great Spotted Woodpecker (*Dendrocopus major*) fly into a small oak, and after pausing a few seconds, run rapidly up the trunk, stopping to tap occasionally; after a rather more prolonged pause it suddenly descended the tree backwards some eighteen inches, stopped, ascended again a few inches and then flew out; the descent was quite as rapid as the ascent. I could not observe whether the tail-feathers were kept away from the tree in the descent, as is described in the article referred to, but I think this was probably the case, as otherwise they must inevitably have caught in the crevices of the bark. A second bird accompanied this one, but I did not see it climb.

A. GEOFFREY LEIGH.

[While abroad in 1907-8 in Corsica, and 1909-10 in Roumania, I met with two of the Continental forms of this species, and saw them move backward down the trunk of trees, for short distances, dozens of times, exactly as our British Great Spotted Woodpecker does. When a bird is rather shy of going on to the nest she will alight above it, look round, and when satisfied, descend backwards by a series of springs to the hole. I have always regarded the backward movement as characteristic of the Woodpeckers, as opposed to the head-downward progress of the Nuthatches.—F.C.R.J.]

NORTHERN GREAT SPOTTED WOODPECKER IN NORTHUMBERLAND.

IN his paper on "The Birds of that portion of the North-east coast between Tynemouth and Seaton Sluice, Northumberland" (*Zoologist*, 1911, p. 312), Mr. J. M. Charlton mentions several occurrences of Great Spotted Woodpeckers during the last nine years, but only one of these appears to have been shot. Through the kindness of this gentleman I have been able to obtain this specimen, which was shot at Holywell Dene in November, 1904. On examination I find that it is a bird of the year that has completed its autumn moult, with the exception of the crown, where new half-grown black feathers are visible amongst the red ones of the juvenile dress. The wings measure 132 mm., and the first primary exceeds the longest primary-coverts by 7 mm., while the bill is actually the broadest I have yet seen, and alone marks it as an individual of the Northern race (*Dendrocopus major major*). The coloration of the under-parts is so obscured by the dirt acquired from Northumbrian tree-trunks, that nothing definite can be said about its shade of colour. N. F. TICEHURST.

YOUNG TAWNY OWL FEIGNING DEATH WHEN CONFRONTED WITH DANGER.

ON June 24th, 1911, while searching for the nest of a Nightjar in a wood at Alderley Edge, Cheshire, a loud snapping of mandibles drew my attention to a young Tawny Owl (*Syrnium aluco*) sitting on a low branch. At my nearer approach it sought refuge in flight, and giving chase, I eventually came up with it crouching on the ground, with feathers ruffled up so that it looked twice its real size, and snapping its bill angrily. I threw my coat over the bird, and on withdrawing it was surprised to find it feigning death in a thoroughly con-

vincing manner, lying absolutely inert in my hand with closed eyes and the previously ruffled feathers pressed close against the body. After a little while I transferred the bird to the other hand, whereupon it suddenly threw off its feigned unconsciousness and, opening its eyes wide, struck out viciously with its formidable talons, and with violently flapping wings slipped out of my grasp and flew off, only to come to ground again a few hundred yards away. On my coming up to it a second time it no longer tried to feign death, but contented itself with ruffling its plumage and snapping its mandibles, and on my seizing it again only struck out with its talons. Finally I let the bird go, whereupon it flew into a young birch tree not far away, and after surveying me intently for several minutes began to call for its parents with a peculiar high pitched, mewing note, but while I remained in the vicinity the old Owls, which from the uneasy twittering of small birds I knew not to be far away, did not put in an appearance.

M. V. WENNER

[In connection with the above it may be worth noting that a particularly "tame" Tawny Owl which nested in a hole in a beech-tree, allowed herself to be pushed off her young with a stick and turned over on her back, in which position she remained motionless so long as she was being watched.—H.F.W.]

LITTLE OWL IN HEREFORDSHIRE AND WORCESTERSHIRE.

DURING April and May, 1911, I not infrequently heard Little Owls (*Athene noctua*) at night at Suckley (Worcestershire); also once in the parish of Acton Beauchamp (Herefordshire), when I happened to be over the border after dark.

C. J. ALEXANDER.

WHIMBREL IN WORCESTERSHIRE.

I UNDERSTAND that the occurrence of the Whimbrel (*Numenius phaeopus*) in the west-midland counties is somewhat uncommon. It therefore seems worth while to record that on May 20th, 1911, I heard two near Suckley (Worcestershire), about 6.45 p.m.; they were quite low down, apparently flying north, but as I was in a wood, I did not see them.

C. J. ALEXANDER.

BLUE EGGS OF COMMON TERN.

ONE day last June I visited the flourishing colony of Common Terns (*Sterna fluviatilis*) on the Chesil Bank, just opposite the well-known swannery at Abbotsbury. I examined a good many nests, some of which were nearly concealed by festoons of the wild pea (*Lathyrus maritimus*), which grows in abundance there, and in about ten nests there was one pale blue, unspotted egg, but in no nest more than one. I was given to understand that the Terns were carefully protected, and there is no doubt that the number of birds breeding there has increased of late years, so that, as Mr. Borrer suggests, some other explanation for the absence of coloration must probably be sought for, as I do not think the nests have been plundered to any extent. M. VAUGHAN.

At the Hook of Holland, where there is a large colony of Common Terns, I saw, on July 8th, 1911, a nest containing one, and on July 22nd, a nest containing two unspotted blue eggs. This colony is not protected. G. J. VAN OORDT.

[There seems little doubt that the blue eggs referred to above are due to some weakness of the reproductive organs. The enormous increase in the proportion of blue eggs laid by Pheasants of late years, is ascribed by most practical keepers to the over-production of eggs by hens kept in pens for that purpose, and is generally regarded as a sign of weakness. The blue Terns' eggs have a dull surface without gloss, and appear to be thin-shelled and defective both in coloring matter and shell material. This may be due to premature deposition, or may be a sign of exhaustion of the reproductive organs or that the general health of the parent is below the normal standard. Abnormal eggs of a somewhat similar type are to be found in most of our large colonies of Black-headed Gulls, and it seems possible that indiscriminate protection may be the cause in some cases, as well as over-production in others where protection is lacking. Such eggs are, of course, conspicuous, and would be more likely to be taken both by egg collectors and natural enemies, such as rats, and egg-stealing birds. Where, however, the colony is protected and such eggs are allowed to hatch off, there is a natural tendency for variations, even when due to weakness, to become perpetuated or to increase. It has been noticed that while similar variations are common both in artificially protected colonies of Black-headed Gulls, and also where they are systematically robbed, they are practically unknown in

the large colonies in the Government reserves in Denmark, where the birds live under perfectly natural conditions.—
F. C. R. JOURDAIN.]

SABINE'S AND LITTLE GULLS, AND GREY PHALAROPES IN NORFOLK.

I SHOULD like to record that I saw a young Sabine's Gull (*Xema sabinii*) on the beach below Blakeney Harbour, Norfolk, on October 28th, 1911, the wind having blown out to the north-east the previous afternoon. My friend Mr. F. I. Richards and Edward Ramm were with me at the time.

The latter tells me he saw three Little Gulls (*Larus minutus*) besides several Grey Phalaropes (*Phalaropus fulicarius*) there, during the gale on October 1st. CLIFFORD BORRER.

BLACK-HEADED GULL IN WORCESTERSHIRE.

ON March 31st, 1911, about 2 p.m., I saw two Black-headed Gulls (*Larus ridibundus*) flying south-east over Suckley (Worcestershire). As this was a remarkable migration day, I imagine that these were not simply wanderers, but were passing across the country on a regular migration.

C. J. ALEXANDER.

PUFFIN IN BERKSHIRE.

ON November 1st, 1911, a living Puffin (*Fratercula arctica*) was brought to me for identification. It was an immature bird, and had been found in a ditch at Ascot, Berkshire, in an exhausted condition. It lived about three days and died apparently from starvation. DUDLEY W. COLLINGS.

[Mr. H. Noble (*Vict. Hist. Berks.*) gives four occurrences of the Puffin in the county—the last near Faringdon on October 25th, 1893. One was reported on the Thames between Barnes and Hammersmith on October 4th, 1911 (*Field*, 7.X.1911. p. 825).—Eds.]

MANX SHEARWATER IN CUMBERLAND.

ON August 9th, 1911, I found a dead Manx Shearwater (*Puffinus anglorum*) on the shore at St. Bees, Cumberland. It was too much decomposed for preservation, and I should say that it had been dead about a month. I was, however, able to secure the skull. It was an adult bird. There appear to be only five previous records for Cumberland.

MARJORY GARNETT.

though I could neither see the nests nor get at them. I used to spend a good deal of time there, and as I lay on the cliff the birds continually flew round me, frequently coming within twelve to fifteen feet.

When flying the neck is, as it were, "telescoped"—the head is drawn in close to the body, so that they appear to have scarcely any neck at all; and it was this peculiarity that first drew my attention, for I had not expected to see them, and thought at first they were gulls. THOS. GROUND.

[Mr. E. B. Dunlop records (*Ann. Scot. Nat. Hist.*, 1911, p. 246) that the Fulmars (*Fulmarus glacialis*) breeding on Hoy between the Kame and the Old Man of Hoy this year (1911), number hundreds of pairs; that they have increased enormously on the west coast of Hoy; and that three pairs bred for the first time this year at the south end of the island. Mr. Dunlop was informed by the fishermen that the Fulmars drove the gulls away from food, which both desired. Mr. Dunlop is wrong in supposing that they bred for the first time in Hoy "five or six years ago." They have been known to breed there since 1891, and over fifty nests were recorded for Hoy Head in 1902 (*cf.* Vol. II., p. 374), while Mr. T. Ground's evidence (above) goes back to 1896. In the *Scotsman* for July 22nd, 1911, it is stated by "M. S." that six or eight pairs of Fulmars were nesting on the Deerness cliffs (east side of mainland, Orkney), and also on Copinsay. With regard to Shetland, I think Mr. Ground's record for Sandness is new, but they have been known to breed near by in Papa Stour since 1891 (*cf. Fauna of Shetland Islands*, p. 211). They have been recorded as breeding in the Shetland Group from Foula, Horn of Papa Stour, Calder's Geo in Eshaness, Noup of Noss, Unst, Whalsay, Yell and Fitful Head.

The following records from the "Report on Scottish Ornithology for 1910" (*Ann. Scot. Nat. Hist.*, 1911) may be mentioned. Increasing at Barrahead and Cape Wrath (p. 142). Possible nesting of several pairs on the Shiant Islands (O. Hebrides) in June (p. 144). Nesting North Rona (p. 144).—H.F.W.]

SCOTTISH ORNITHOLOGY FOR 1910.

THIS Report, drawn up as last year by the Misses Rintoul and Baxter, covers a number of pages (*Ann. Scot. Nat. Hist.*, 1911, pp. 133-149 and 194-210), and contains a large number of valuable records and observations. These "Reports" have previously always been arranged under species headings,

and have proved of great value for reference purposes ; most unfortunately the form of this " Report " has been altered, and the records and information are arranged under headings such as, New Birds to Scotland or Faunal Areas, Summer and Winter Notes, Migration, etc. For reference this form is practically useless, since, to discover what has been recorded of one species during the year, one has to read through some thirty closely-printed pages : and even if time can be found for this, there is a great risk of missing the bird one is looking for. This is especially evident in the migration notes which are arranged chronologically. To group the information under the headings of species is the only way to make a Report of this kind really useful, and we sincerely hope that the present plan will not be continued.

The following records are either new, or have not been previously referred to in our pages. All the dates are in 1910 :—

ROCK-THRUSH (*M. saxatilis*).—In addition to the male already recorded (*antea*, vol. IV., p. 117), another is said to have been seen at Pentland Skerries, May 17th (p. 135).

GREENLAND WHEATEAR (*S. æ. leucorrhoa*).—One near Carmunnock (Clyde), May 10th, and Tiree (I. Hebrides), October 8th (p. 137).

BLACK REDSTART (*R. titys*).—Occurred on two separate days in spring at Fair Isle, and one seen Scarnish, Tiree, November 4th (p. 137).

WHITE-SPOTTED BLUETHROAT (*C. wolfi*).—The second for Scotland visited Fair Isle during the year, but no date or particulars are given (p. 137).

CONTINENTAL ROBIN (*E. r. rubecula*).—One Isle of May, October 22nd (p. 136).

LESSER WHITETHROAT (*S. curruca*).—Fair Isle, May, June, and August (pp. 198, 200, 202).

SIBERIAN CHIFFCHAFF (*P. r. tristis*).—Several Fair Isle in autumn. Chiffchaffs seen near Lerwick about October 28th, when a specimen of *P. r. tristis* was shot (*cf. supra*, p. 28), were probably also of this form (p. 137).

CONTINENTAL GREAT TIT (*P. m. major*).—One obtained, Fair Isle, November 17th ; one which occurred North Unst (Shetlands), October 25th, was probably also of this race (p. 136).

BLUE-HEADED WAGTAIL (*M. f. flava*) and GREY-HEADED WAGTAIL (*M. f. viridis*).—Appeared at Fair Isle (no date), (p. 138).

RED-BACKED SHRIKE (*L. collurio*).—One near Pittenweem (Fife), May 19th (p. 199), one Balcomie (Fife), and one Isle of May, May 23rd (p. 200), one Lerwick (Shetland), October 23rd (p. 207).

MEALY REDPOLL (*L. linaria*).—Large numbers occurred in October and November all down the east coast, but apparently in greatest numbers in "Forth". They also occurred in the west. Several *L. l. holboelli* were identified.

NORTHERN BULLFINCH (*P. p. pyrrhula*).—One Helensdale near Lerwick (Shetland), October 23rd, one Lerwick, November 20th, and another near there 21st, and two seen there December 18th. One Baltasound (Unst), November 7th. Single birds, Fair Isle, October 24th and 25th, two 27th, others 29th, a number November 2nd, one November 10th. Late in the autumn two near Ceres (Fife), and others near Kirkcaldy (Fife) (p. 138). For other records cf. vol. IV., pp. 211, 292, and 369.

COMMON CROSSBILL (*L. c. curvirostra*).—Bass Rock, July 10th, Barra, August 3rd, Fair Isle June 25th (p. 200), August 8th (p. 201), September 9th (p. 203), and 19th (p. 204), one Ollaberry (Shetlands), September (p. 205).

TWO-BARRED CROSSBILL (*L. bifasciata*).—One Flannans (O. Hebrides), August 14th (p. 139). Only once before obtained in the Outer Hebrides, viz., in June, 1909, at the same place.

ORTOLAN BUNTING (*E. hortulana*).—Several spring records, and one autumn, Fair Isle (no dates) (p. 139).

LAPLAND BUNTING (*C. lapponicus*).—Two seen Baltasound, Unst (Shetlands), October 30th (p. 139).

STARLING (*S. vulgaris*).—A pair observed feeding young in the nest at Grantown-on-Spey on January 24th (p. 142).

WOOD-LARK (*A. arborea*).—Single birds twice reported late in autumn from Fair Isle (p. 139).

SHORE-LARK (*O. alpestris*).—One Fair Isle (no date) (p. 139).

WRYNECK (*T. torquilla*).—One North Ronaldshay, August 30th, and one Fair Isle, August 31st (p. 202). Others are mentioned without specific locality or date in the middle of May (page 199).

HOOPOE (*U. epops*).—One for two days in spring, and single birds in autumn on Fair Isle. Reported from Baltasound, Unst (Shetlands), September 12th, 19th, and 24th. One Kingsdale House (Fife), October 1st. One Pitlochry (Perth), October 19th (p. 139).

- CUCKOO (*C. canorus*).—One hatched out at Ollaberry (Shetlands) in the second week of August (p. 145).
- GREENLAND FALCON (*F. candicans*).—One Flannans (O. Hebrides) March 17th (p. 140).
- KING-EIDER (*S. spectabilis*).—A drake, Noss Sound, Bressay (Shetlands) June 29th (p. 140).
- TURTLE-DOVE (*T. communis*).—One Fair Isle, September 26th (p. 204).
- BAILLON'S CRAKE (*P. bailloni*).—One near Halkirk (Caithness), August 21st (p. 140).
- DOTTEREL (*E. morinellus*).—One Bute (I. Hebrides), May 15th, and one Flannans (O. Hebrides), May 31st (p. 140).
- GREEN SANDPIPER (*T. ochropus*).—Four days in spring and fourteen days in autumn (one to three birds at a time), Fair Isle. One near Halkirk (Caithness), August 18th (p. 141). Rare in north and west Scotland.
- BLACK-TAILED GODWIT (*L. belgica*).—Three Tiree (I. Hebrides), September 7th (p. 141).
- ICELAND GULL (*L. leucopterus*).—Occurred Flannans (O. Hebrides), in winter (p. 146).
- GREAT SKUA (*M. catarrhactes*).—Recorded from Unst (Shetlands) as being seen to "swoop down on a Puffin or Kittiwake on the water, seize it, and hold it under till drowned; then pluck and eat it, in the manner of the Falcon" (p. 148).
- ARCTIC SKUA (*S. crepidatus*).—Recorded from Unst as chasing Puffins which rise to a great height and then drop like a stone towards the water when the Skua is upon them. When nearing the water the Puffin "shears" along its surface, and on the point of entering it, drops its catch (p. 147).
- RED-NECKED GREBE (*P. griseigena*).—Lerwick (Shetlands), one, October 21st, four October 26th (p. 141).

GOLDEN ORIOLE IN HEREFORDSHIRE.—An example of *Oriolus galbula* is reported by Mr. E. Cambridge Phillips in the *Field* (30.X.1911, p. 775) as having been seen "during the summer," and as late as August 28th, 1911, at Cusop, Herefordshire.

SCOPS OWL IN IRELAND.—Mr. D. C. Campbell reports (*Irish Nat.*, 1911, p. 186) that he received on July 24th, 1911, a small owl in bad condition from Gallyliffen, co. Donegal. The bird has been identified from one of its wings by Mr. A. R. Nichols as a specimen of *Scops giu*.

NIGHT-HERON IN YORKSHIRE.—Mr. T. Stephenson records in the *Field* (11.XI.1911, p. 1081) that an immature male *Nycticorax griseus*, was shot on the banks of the Esk near Whitby on October 26th, 1911.

SPOONBILL IN LINCOLNSHIRE.—On November 13th, 1911, an immature example of *Platalea leucorodia* was shot at the mouth of the river Welland, and is reported by Mr. C. N. Tunnard (*Field*, 18.XI.1911, p. 1129).

LONG-TAILED DUCK BREEDING IN ORKNEY.—Mr. O. V. Aplin announces (*Zool.*, 1911, p. 432) that he has received news of the breeding of the Long-tailed Duck (*Harelda glacialis*) in Orkney in the summer of 1911. No details are, however, vouchsafed, but we may presume that so careful an ornithologist as Mr. Aplin would not make the statement, were he not in possession of scientific proof of its correctness, and we may express the hope that such proof will not be withheld, more especially as the breeding of the Long-tailed Duck both in the Orkneys and Shetlands has for a long time been suspected though never conclusively proved. There are at least three instances of eggs being taken in the Shetlands, which were so far as could be judged, both by their appearance and by the evidence adduced, those of the Long-tailed Duck (*cf. Fauna Shetland Islands*), while there is some evidence of its having bred in Orkney (*Fauna Orkney Islands*). The bird cannot, however, be admitted unhesitatingly as a British breeding-bird without better proof than has as yet been given.

GREY PHALAROPE IN SOUTH WALES.—The Rev. W. F. Evans reports (*Field*, 18.XI.1911, p. 1129) that a specimen of *Phalaropus fulicarius* was seen for some days (presumably in November) on a pond at Cowbridge (Glamorgan).

BLACK-TAILED GODWITS IN IRELAND.—Mr. R. J. Ussher records (*Irish Nat.*, 1911, p. 200) that he observed a party of some eight *Limosa belgica* from September 27th to October 9th, 1911, at Shandon near Dungarvan (Waterford). Two immature birds were shot. Mr. Ussher also states that others were seen by Major Barrett-Hamilton at Kilmanock (Wexford) on September 22nd.

GREAT SKUA OFF AYRSHIRE.—Mr. J. M Crindle records (*Glasgow Nat.*, III., p. 126) that he saw an example of *M. catarrhactes* half a mile north-west of Dunure on July 7th, 1911.

THE LATE EUGENE WILLIAM OATES.

It is with great regret that we have to record that Mr. Eugene William Oates died at Edgbaston, Birmingham, on November 16th, 1911, at the age of 66. From 1867 to 1899 Mr. Oates was in the Public Works Department, India. As an ornithologist he will be best known for his excellent volumes on the "Birds" in the well known *Fauna of British India*, edited by the late W. T. Blanford. He also wrote *A Handbook to the Birds of British Burmah*, edited the second edition of Hume's *Nests and Eggs of Indian Birds*, and wrote *A Manual of the Game Birds of India*. Mr. Oates was also the author of the first two volumes of the *Catalogue of the Collection of Birds' Eggs in the British Museum*, and was joint author with Captain Savile G. Reid of the 3rd and 4th volumes of that work. Mr. Oates was a Fellow of the Zoological Society and was elected a member of the B.O.U. in 1882, but retired in 1903, and shortly afterwards, owing to ill-health, he ceased to do much active bird-work.



REVIEWS



The Home-Life of the Osprey. Photographed and described by Clinton G. Abbott, B.A., A.A.O.U. Small 4to., pp. 54 and 32 Mounted Plates. Witherby & Co. 6s. net.

IN this, the third volume of Messrs. Witherbys' "Home-Life" series of bird pictures, the domestic affairs of one of our almost extinct birds are depicted. It is sad to think that one must cross the sea to study intimately the life-history of so noble a species as the Osprey, that was once a conspicuous ornament of our own northern lochs. This fact will not, however, detract from the usefulness of the present work, for although the American bird ranks as a separate geographical race from ours, there is no reason to suppose that it differs, apart perhaps from the diversity of nesting-sites chosen, in any of its habits from that of its Old World representative. Mr. Abbott has accumulated a large number of facts concerning the nesting-habits of the Osprey, and presents them in an interesting form, accompanied by a series of plates reproduced from photographs taken by himself and Mr. H. H. Cleaves, which for interest and technical skill will be the envy of all bird-photographers. Both observations and photographs are the result of many visits to the birds' breeding-places on the coasts of New Jersey, Great Lake in N. Carolina, where there is a colony of thirty pairs, and particularly to Gardiner's Island, New York. The latter, 3,000 acres in extent, is, the author points out, an ideal resort for Ospreys, surrounded as it is by waters teeming with fish, while it has remained since 1637 in the ownership of one family who have been the bird's zealous guardians for generations. Even the fishermen who use the island in the course of their labours, take an interest in the birds and do not in the least grudge them the fish they consume. Here, unmolested by human or other enemies, Ospreys to the number of 200 pairs annually resort to rear their young, forming what is probably the largest colony in the world. They appear to be sociable and amiable birds, the sides of the larger nests being frequently used as nesting-sites by Sparrows and other birds, and although more or less at enmity at one spot with a colony of Terns, it is always the latter who are the aggressors. The chief thing that will strike one on visiting such a colony, or looking at Mr. Abbott's photographs, apart from the actual numbers of the birds, is the extraordinary diversity of the nests themselves and the nesting-sites. Varying from the scantiest

of nests on the bare ground to piles of sticks and other materials generations old, not only on the ground but on rocks and in trees, as well as on such incongruous situations as house-roofs, wooden fences and telegraph-poles. The diversity of nesting-sites appear to be only equalled by the heterogeneous nature of the nest material, often consisting mostly of sticks, but no sort of flotsam or jetsam seems to come amiss, while the bird is constantly making additions during the whole time nesting is in progress. Besides his general and particular description of nests and nesting-sites, the author gives a great deal of information on the laying of the eggs, incubation, rearing, feeding and sheltering of the young, the whole interspersed with personal experiences which add not a little to the attractiveness of the descriptions. Special attention may be drawn to the markedly protective pattern and colouring of the young shown in Plate 6, the attitudes of aggressiveness and concealment shown in the following ones, and the manner in which the young suffer from the heat shown in Plate 27, an experience that appears to be common to a good many species that build unprotected nests. We must not omit mention of the nest shown on Plate 3A, which, although built on a *sea-girt* rock, is of special interest to British ornithologists since, as the author truly remarks, it is so strongly reminiscent of the nests described by St. John in our own Highland lochs, and the sites, now long abandoned, figured in the Scotch Fauna series.

The most attractive plates to most people will doubtless be the really wonderful series depicting the old birds in various positions of flight. For sharpness of detail they are certainly amongst the best photographs of flying birds that have ever been produced. No doubt the conditions of light and atmosphere are almost ideal in such a situation as Gardiner's Island for procuring photographs of this character, and the Osprey would not appear to be one of the most difficult of subjects. Such pictures as these, nevertheless, reflect the highest praise on the author's methods and patience, as well as his ability and skill as a naturalist and photographer.

N.F.T.

The Life of the Common Gull. Told in Photographs by C. Rubow. (Translated from the Danish). Pp. 6 and 25 Plates. Witherby & Co. 1s. 6d. net

IN the above small brochure the author gives us a short sketch of the life-history of the Common Gull (*Larus canus*). The story is pleasantly told in a popular manner, and hardly calls for comment, though, perhaps, the incident related

concerning the execution of an individual by the joint action of the other members of a breeding colony may be mentioned. There seems to be no doubt that such events do take place, though it is very difficult or impossible for us to elucidate the how, why, and wherefore of them. There seems to be a possibility, from our own observations, that the same kind of action sometimes takes place amongst Black-headed Gulls, though in this case a far more pugnacious species is concerned.

The main attraction of the book is, of course, the series of twenty-five plates that form its greater portion. These are all taken from photographs of wild birds, and depict the most important events in their life-history and habits. All are good, but those showing the parent birds with their young are more particularly pleasing, while No. 15, depicting a flock following the plough, is quite an artistic reproduction of a very characteristic scene.

N.F.T.

Birds and Birds' Nests of Bromsgrove. By A. MAYALL.
Illustrated. Witherby & Co. 2s. net.

THIS little book consists of reproductions of photographs of the nests of the birds found breeding in the neighbourhood of Bromsgrove, to which are added lists of "Habitual Breeders," "Occasional Breeders," "Occasional Visitors," "Rare Visitors." It appears to us a good idea, and likely to encourage local interest in birds, but it might have been made of more scientific interest by the addition of a few details with regard to the status of each bird in the neighbourhood.



LETTERS



To the Editors of BRITISH BIRDS.

BULLETIN B.O.C., VOL. XXVIII.—CORRECTIONS.

SIRS,—Will you kindly allow me to point out one or two unfortunate errors in the last (sixth) Migration Report ?

On page 214 the records of the Yellow-browed Warbler have got into a sad muddle, and I very much fear that I alone am responsible for this. In line 2 delete “and 30th,” line 3 should read “October the 2nd and 24th” etc., the word October in line 4 should be deleted, and in line 6 “28th of October and 4th of November” should read “23th of September and 4th of October”

On page 257 the two first records of the Black Tern have been transposed, the Hampshire one belonging to August the 3rd and the Anglesey one to September the 8th. As the accuracy of these may be important to county ornithologists, I take the earliest opportunity of correcting them.

N. F. TICEHURST,

Hon. Sec. B.O.C. Migration Committee.

[Mention may here be made of the following items in the Report which should have been included in my notice on page 176. Several Black Redstarts (*R. titys*) seen and four killed at the Would Lt.-vessel (Norfolk) at 2 a.m. on May 2nd, 1910. A Blue-headed Wagtail (*M. flava*) got at St. Catherine's Lt. (I. of W.) on the night of May 4th 5th, 1910. A Kingfisher (*A. ispida*) killed at the South Foreland Lt. (Kent) at 1.45 a.m. on May 15th, 1910, and another at the Leman and Ower Lt.-vessel (Norfolk) at 2 a.m. on October 13th, 1909. A pair of Kentish Plover (*Æ. cantiana*) seen on the Hampshire coast on May 11th, 1910. Eight Quail (*G. communis*) apparently locally bred, found near Salisbury (Wilts.) in September and October, 1909. A single Little Stint (*T. minuta*) at Tring (Herts.) on August 29th, 1909, and single Curlew-Sandpipers (*T. subarquata*) at the same place on August 29th and September 12th.—H.F.W.]

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U.

ASSISTED BY

REV. F. C. R. JOURDAIN, M.A., M.B.O.U., AND NORMAN F.
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DR. L. BUREAU'S WORK ON THE PARTRIDGE.

IN a volume* of 124 pages illustrated with 35 plates, many of them half tone blocks taken from actual specimens, Dr. Bureau describes his work on the determination of age in the Partridge (*Perdix cinerea*), which, as he tells us, is the result of eleven years methodical observation in the field, preceded by years of preparatory study.

The method of the determination of a young bird's age is based upon the moult of the primaries of the juvenile plumage, which begins before the end of the fourth week and lasts to the end of the fourth month, i.e. to the middle or end of October or even, for later broods, until the beginning of November. After this and up to the age of fifteen or sixteen months, it is still possible to say whether a bird is young or old by means of the first two primaries, which are not replaced at the first moult but are retained until the end of the second moult in the bird's second September or October. The extremity of these feathers is pointed, whereas that of those that replace them is more rounded. This is of course a method of telling young birds from old ones well known to sportsmen, though perhaps the reason (viz: that these are juvenile plumage feathers retained until the bird is over a year old) is not so generally realized. The main points in the moult upon which the determination of age is based are as follows:—

1. The absolute regularity with which the primaries of both wings are moulted from within outwards, i.e. from ten to three.
2. Each primary is dropped at a certain age, or, in other words, when the one internal to it has attained a certain length, which is constant for each feather.
3. The daily growth of each new feather is fairly constant although not the same for each one. It may be taken as fairly accurate that this rate is a little greater during the earlier days of growth,

L'Age des Perdrix. 1. *La Perdrix grise.* Par le Dr. Louis Bureau, Directeur du Muséum d'Histoire Naturelle de Nantes, Foreign Member of the B.O.U. Williams and Norgate, 14, Henrietta Street, Covent Garden, London, W.C. 8vo., 124 pp., 35 figures.

and that the innermost primaries grow rather more rapidly than the outer ones.

4. The progress of the moult is the same within certain very narrow limits, both in birds of the same covey and in birds of different coveys of the same age.
5. The moult and growth of the primaries appear to stand apart in the matter of regularity from all the other processes of development, e.g. the bird's weight bears no constant relationship to this or to any other part of its development.

METHODS OF STUDY.

In the first place the author obtained his general ideas by studying the growth of hand-reared birds, but he is careful to say that he has made use of no facts so acquired that were not afterwards confirmed by means of wild-birds.

Secondly, he gradually compiled what he has termed his "Table of Moults," showing the daily growth of each feather up to the time when the one external to it was shed. This he did by shooting individuals from coveys of unknown age at known intervals of time, until he had acquired such a large number of observations and measurements that it was safe to deduce averages for each primary.

Thirdly, he had certain nests marked, and their date of hatching noted, so that wild-bred coveys of absolutely known age could be watched and individuals killed from them at specified intervals. By means of these he was able first of all, to fix what he calls the "zero-point," i.e. the exact age at which the tenth primary is dropped, and secondly to apply "controls" of known age to his "Table of Moults," and to compile finally what he terms his "Chronometric Table," which shows the day on which each primary is shed, and the daily growth of each feather up to the time its external neighbour is dropped. By using this table any one can tell, within a day or two either way, the age of any bird that he happens to shoot up to an age of 116 days, i.e. until the third primary is fully grown, the bird being then practically also full grown, and

indistinguishable from old ones, except by its first two primaries.

Dr. Bureau points out that the figures in this table are average ones, based on a large number of actual measurements; they therefore represent the normal development of a young Partridge with very fair accuracy, so that if any individual is found to exhibit any marked deviation from the figure given in the table, it is extremely probable that the particular bird is behind or in advance of the normal development for its age. The amount of this variation also can easily be determined by comparing the lengths of the last new primary and that of its internal neighbour with the figures in the "Chronometric Table," and may be summed up thus: "A young Partridge in which a growing primary is longer than the average at the time that its external neighbour is shed is probably a backward bird, and vice versa, where it is shorter the bird is a forward one." The possible errors from this variation in development are given by the author in a table on p. 40 and are shown to be within very narrow limits—viz: between one and two days either way in the case of the tenth to the fifth primaries, and three days either way in the case of the fourth and third; when, therefore, the whole period of 110 days is taken into consideration, the amount of possible error is for practical purposes negligible, moreover extreme cases are quite rare.

On page 16 will be found the table giving the rate of increase in twenty-four hours of each first winter-plumage primary, and from this it will be seen that the tenth grows the fastest (5.5mm. per diem), the ninth to the fifth grow 5mm., the fourth 4mm., while the third is the slowest, growing 3.7mm. each twenty-four hours.

Having considered the method of working, we will now summarize the author's results of the progress of the moult at the time when each primary is lost.

THE YOUNG PARTRIDGE AT VARIOUS AGES.

At an age of 13 days the young bird is first able to fly; the wings are furnished with seven primaries and eight secondaries, all growing. The third primary

is still within its sheath and the first and second have not appeared at all.

At the 24th day (23-25) the tenth primary falls and a new feather at once begins to grow, so that immediately afterwards the bird wears a mixture of three plumages. (1) the head and neck are downy; (2) the body-feathers and the wing-feathers except the tenth, and the tail (35mm. long), belong to the juvenile plumage; (3) the new tenth primary of the first winter-plumage. The first and second have not yet sprouted. Beak, brown; feet and nails, pale yellow. It can fly 100-150 metres, and weighs about ninety grams.

On the 27th day the ninth primary is dropped and the tenth has grown 15mm. The first and second have begun to grow, the tail measures 40mm., and some feathers have appeared on the crown.

On the 33rd day the eighth primary is lost, the ninth having reached a length of 29mm., and the first and second 23 and 31mm. respectively. Tail 45mm. long, and the body completely clothed in the juvenile plumage.

On the 39th day the seventh primary falls, and the eighth has grown 34mm, while the first and second have reached respective lengths of 32 or 33 and 46 to 55mm.

On the 47th day the sixth primary is dropped, when the seventh is 39mm. long. In the most forward birds the grey feathers with red crossbars of the first winter-plumage are beginning to show on the flanks and the speckled feathers are also appearing on the sides of the breast, and as far as half way up the neck, forming two bands, which approach one another in the middle line. A few first winter-plumage feathers are also beginning to show in the middle of the back. Length from tip of beak to end of median tail-feathers (growing rectrices of the first winter plumage) 225mm. Expanse from tip to tip of third primaries (the longest) 447mm. Weight 228 grams.

On the 55th day the fifth primary is lost, and the sixth has grown 44mm.; the first and second have lost their basal sheaths, and measure 83 and 94mm. respectively. The second and third most external of the median coverts are generally sufficiently developed for their sexual

characters to be seen. The horse-shoe has not yet begun to appear. Feet, dingy yellow; soles, lemon-yellow.

About the 62nd day the fifth primary being 35mm. long the first attains its full growth of 93 to 95mm. The tail is about 70mm. long. The bands of new grey feathers on the sides of the neck meet in the middle line on the throat and the sexual characters when well developed are visible in the feathers of the back.

On the 67th day the fourth primary is dropped, the fifth being 58mm. long and the first and second full grown. The sexual characters of the median wing-coverts are plainly to be seen, the remainder of the plumage has greatly progressed, and the horse-shoe has begun to appear. The central tail-feathers are full grown—75mm. long.

On the 86th day the third primary falls, the fourth being 76mm. long. The bird is completely clothed in its first winter-plumage, except for the head, the dorsum, sides and lower part of the middle line of the neck, and the external borders of the flanks. The yellowish-red feathers have begun to appear on the forehead, throat, cheeks and eyebrows of the males, and the horse-shoe is apparent. The tail is full grown with the exception of the two external feathers.

At about the 92nd day the red on the forehead is fully developed. Two bands of old feathers extend from the cheeks to the shoulders. The red wattle begins to appear on the lower eyelid.

At the 100th day the body-moult is complete except that a few old feathers can still be found behind the eyes, over the fork of the clavicle, and on the sides of the lower half of the neck. The red wattles have begun to appear. The feet are yellowish-brown and the bill blueish-brown.

At the 116th day the third primary measures 110mm. and is fully grown; the only trace of the juvenile plumage consists of a small tuft of feathers on the side of the neck at the apex of the bare space, and these are gradually lost, the growth and full moult of the juvenile plumage being thus accomplished in about four months.

THE MOULT OF THE SECONDARIES.

This is accomplished with similar regularity, but is not synchronous with that of the primaries. It takes place in two groups—an internal and external—simultaneously. The internal group consists of the third to the fifteenth, and the external of the first and second. The former is moulted from without inwards and the latter from within outwards. The third (first of internal group) is shed while the seventh primary is growing, or at the time of the fall of the sixth (say on the 45th-50th day). The second is dropped about the same time as the fourth primary, and the first a little before the fall of the third primary.

THE MOULT OF THE TAIL.

The tail of the juvenile plumage is full grown (49-51mm.) at an age of thirty-nine days, and when widely spread, shows a slight median indentation with a still slighter lateral indentation on each side, thus forming a scalloped outline, which is further accentuated by the two upper tail-coverts covering the two middle rectrices, which by their great length and shape simulate tail-feathers. Though the moult takes place with great regularity from within outwards, it does not coincide with the fall and growth of the primaries.

The tail has hardly become full-grown before the six feathers on either side of the middle line are rapidly dropped in pairs, the eighth, seventh and sixth falling almost simultaneously. Nothing is left on either side, except the two most external feathers, which project markedly and give the bird a characteristic "swallow-tailed" appearance which lasts until a little after the loss of the sixth primary (say *from the 40th to the 50th day*).

On the 47th day the six or seven new tail-feathers that are growing on either side of the middle line measure about 25mm. By the time the fifth primary has dropped (*55th day*) the most external tail-feather has usually been shed also, while the rest of the tail has gone on growing and has a characteristic arched shape. *By the 67th day* the middle feathers are full-grown

(75mm.) The tail is ample and much rounded, and the two lateral rectrices shorter than the rest, can be seen, even in flight. These are sometimes still not quite fully grown *on the 86th day*, when the third primary is lost.

DIFFERENCES BETWEEN THE FIRST AND SECOND MOULTS.

In the first moult:—

1. The primaries are moulted from within outwards, from the tenth to the third.
 2. The first two primaries are not moulted.
 3. The secondaries moult in two groups simultaneously
 - a. The external (1 and 2) from within outwards.
 - b. The internal (3-15) from without inwards.
 4. All the contour feathers and the tail are moulted.
- The bird therefore breeds in its first spring in a compound plumage.

The second moult begins as soon as the chicks are hatched, and in it

1. The primaries are moulted from within outwards, from the tenth to the first.
2. The secondaries are moulted in three groups simultaneously.

a. The external (1 and 2) from within outwards.	
b. The middle (3-11).	} from without inwards.
c. The internal (12-15)	

Dr. Bureau points out that the time lost in the replacement of ten primaries at the second moult in contrast to eight at the first, is compensated for by the shortening of the moult of the secondaries, which moult in three places at once instead of two.

DETERMINATION OF SEX.

In connexion with the determination of sex by the plumage in adult birds, Dr. Bureau has a good deal to say, and it is clear that this part of his subject is greatly complicated by the amount of individual variation that is found in both sexes. After enumerating a number of characters by which typical males and females can be separated, none of which are, however, invariably found in all specimens, he points out that there are only three that are so constant as to be relied upon with any certainty. Of these, the best of all is

the yellow transverse bars, first pointed out by Mr. Ogilvie-Grant as being characteristic of the median wing-coverts of females, but even these Dr. Bureau states are sometimes present (at any rate in birds from Loire Inférieure) in males after both their first and second moults, but in these cases other indications of the male sex are usually present.

A second good distinction, although not so invariably present as the first, consists of the yellow, drop-shaped spots at the ends of the feathers of the back in females. Their distribution is, however, variable, they may cover either the whole back or its upper part only, and may be absent. The third distinguishing character is the well-known horse-shoe, but unless its variability is well understood it is a very fallacious character, and should in most cases only be used in conjunction with others. The horse-shoe of the male seems to be almost constantly a well-developed one, but that of the female exhibits every variation between complete absence (when the birds are often said to have a "white horse-shoe") through more or less imperfect horse-shoes composed of many or few oval chestnut spots, up to a complete horse-shoe almost or quite as well developed as in the male. Mr. Ogilvie-Grant states that in females after the first moult a well-developed horse-shoe appears to be characteristic of certain districts in England, and a feebly developed one characteristic of others, while the former lose the greater portion of it at their second moult. In Brittany, on the other hand, Dr. Bureau finds that the variation in development of the horse-shoe is entirely individual, and bears no relation to age. Occasionally specimens are met with in which the sex is not determinable with certainty without an examination of the internal organs.

In the foregoing we have summarized Dr. Bureau's methods of working and the results that he has achieved, in the part of his book that deals with moult and the use to which it can be put in the determination of a bird's age and sex, but space forbids us to reproduce any of the numerous examples, plates, and diagrams that he makes use of to illustrate each step of the work. It must suffice to say that these appear amply to bear out

all that he says, and prove that he has accomplished an extremely valuable piece of investigation in a most painstaking manner. It is this portion (the first ten or eleven sections) that contains most of the new work in the book, and it is only possible here to mention the headings of the remaining sections, which however, contain much valuable information, particularly from the point of view of the sportsman. The subjects dealt with comprise: The structure of the wing of the Partridge as an introduction to the study of the moult; reproduction, pairing, nesting, eggs, incubation, hatching; different ways of telling old from young birds; geographical races and individual variation; weights; methods of judging the age of birds on the wing.

In conclusion the author states that a similar piece of work on the Red-legged Partridge is in an advanced state, but that he had not yet been able to get enough material for a sufficient number of "controls" and tests. We can only hope that the present season has afforded him the requisite opportunities for obtaining them, and we shall look forward with pleasure to the perusal of Vol. II. of *L'Age des Perdrix*.
N.F.T.

THE NORTH AMERICAN PEREGRINE (*Falco peregrinus anatum*).

A NEW BRITISH BIRD.

IN LINCOLNSHIRE.

ON September 28th, 1910, a large falcon was netted by one of the men engaged in catching plovers at Humberstone on the Lincolnshire coast. It resembled a very large and dark-coloured Peregrine, and measured twenty inches in length, the wing being fourteen inches. I sent the skin to Dr. E. Hartert, who pronounced it to be an example of the American form of the Peregrine (*Falco peregrinus anatum*), which does not appear to have been previously recorded from any part of Europe.

This form is given in the *A.O.U. Checklist* as breeding locally (except in the north-west coast region where Peale's Peregrine, *Falco p. pealei*, is found) from Norton Sound, Alaska, northern Mackenzie, Boothia Peninsula, and western-central Greenland south to central Lower California, Arizona, south-western Texas, Kansas, Missouri, Indiana, Pennsylvania, and Connecticut; winters from southern British Columbia, Colorado, and New Jersey to the West Indies and Panama, and occurs in southern South America.

How this individual reached the English coast it is impossible to say, but being a bird of great powers of flight, its visit is perhaps no more wonderful than that of the many waders which reach us from the same continent.

G. H. CATON HAIGH.

IN LEICESTERSHIRE.

AT the meeting of the British Ornithologists' Club, held on June 14th, 1911, Mr. E. Bidwell exhibited a very dark Peregrine which had been shot by Mr. W. Whitaker at Newbold Verdon, near Market Bosworth, Leicestershire, on October 31st, 1891. This bird had been examined by



THE NORTH AMERICAN PEREGRINE (*Falco peregrinus anatum*) SHOT AT NEWBOLD VERDON, BY MR. W. WHITAKER, ON OCTOBER 31ST, 1891.

Mr. W. R. Ogilvie-Grant, and pronounced by him to be an example of the North American race (*Bull. B.O.C.*, XXVII., p. 103).

By the kindness of Mr. Bidwell we are able to give a reproduction from a photograph of this specimen.

Concerning both birds, Dr. Ernst Hartert writes to us as follows:—

“I have examined both specimens and consider both to be young *Falco peregrinus anatum*. They are too dark for *F. p. peregrinus*, and were recognized as something unusual by every observer. *F. p. pealei* (as the Americans call the north-western coast race) is a very closely allied form, the young of which are probably not distinguishable from those of *F. p. anatum*, but as it inhabits the Commander and Aleutian Islands and Pacific coast of North America south to Oregon, it is not as likely to stray over to Europe as *F. p. anatum*.”

NOTES

RECOVERY OF MARKED BIRDS.

SONG-THRUSH (*Turdus musicus*).—B.B., No. 13349, marked by Mr. T. F. Greenwood at Hebden Bridge, Yorkshire, on May 13th, 1911, as a nestling. Recovered at La Clarté, Perros-Guirec, Côtes-du-Nord, France, on December 8th, 1911. Reported by Mons. J. Le Maon.

BLACKBIRD (*Turdus merula*).—B.B., No. 7182, marked by Mr. R. O. Blyth at Skelmorlie, Ayrshire, on July 31st, 1910, as an immature bird. Recovered at the same place about November 25th, 1911. Reported by Mr. E. Loque, per Mr. R. O. Blyth.

REDBREAST (*Erithacus rubecula*).—B.B., No. D319, marked by Mr. A. G. Leigh at Hampton-in-Arden, Warwickshire, on September 22nd, 1911, as a young bird. Caught at the same place on December 3rd, 1911, re-marked with ring No. H49 and released.

B.B., No. C372, marked by Mr. W. E. Suggitt at Cleethorpes, Lincolnshire, on August 8th, 1911. Recovered at Great Grimsby, Lincolnshire, on December 11th, 1911. Reported by Mr. S. Clarke.

GREAT TIT (*Parus major*).—B.B., No. B721, marked by the North London Natural History Society on May 26th, 1911, at Woodford Green, Essex, as a nestling. Recovered at Higham's Park, Chingford, Essex, on November 30th, 1911. Reported by Mr. C. F. Miller.

CHAFFINCH (*Fringilla coelebs*).—B.B., No. 4567, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on December 12th, 1909. Caught at the same place on December 8th, 1911, ring replaced and bird released.

B.B., No. A314, marked by Mr. J. Hutton (gamekeeper to Mr. J. Bartholomew) as above, on June 23rd, 1910, as an adult bird. Caught at the same place on December 11th, 1911, ring replaced and bird released.

STARLING (*Sturnus vulgaris*).—B.B. No. 14953, marked by Mr. N. H. Joy at Bradfield, Berkshire, on June 19th, 1911, as a young bird. Caught at same place on November 26th, 1911, ring replaced and bird released.

B.B., No. 11109, marked by Mr. W. E. Suggitt at Cleethorpes, Lincolnshire, on October 11th, 1910. Recovered

on the River Humber, near Grimsby, Lincolnshire, on December 9th, 1911. Reported by Mr. S. Bellamy.

WOODCOCK (*Scolopax rusticula*).—B.B., No. 12625, marked by Mr. C. Boiston, per Mr. M. Portal, at Dilston, Northumberland, on May 21st, 1911, as a nestling. Recovered at Hexham, Northumberland, on November 25th, 1911. Reported by Mr. J. C. Straker, per the Editor of the *Field*.

B.B., No. 12604, marked by Mr. T. Pattison, per Mr. M. Portal, near Carlisle, Cumberland, on May 10th, 1911, as a nestling. Recovered in the valley of the Esk, near Langholm, Dumfriesshire, on December 9th, 1911. Reported by Lord Henry Scott.

REDSHANK (*Totanus calidris*).—B.B., No. 11571, marked by Miss A. C. Jackson at Cromarty Firth, east Ross-shire, on July 5th, 1911, as a nestling. Recovered at Clew Bay, near Westport, co. Mayo, on November 26th, 1911. Reported by Mr. P. J. Doris, the *Times*, and many other papers.

BLACK-HEADED GULL (*Larus ridibundus*).—B.B., No. 8769, marked by Mr. H. L. Popham at Scawby, Lincolnshire on May 29th, 1910, as a nestling. Recovered at Denbigh North Wales, on December 2nd, 1911. Reported by Mr. E. Williams.

B.B., No. 31121, marked by Messrs. Robinson and Smalley at Ravenglass, Cumberland, on June 27th, 1910, as a nestling. Recovered at Marfleet, Hull, Yorkshire, on December 9th, 1911. Reported by Mr. M. W. Compton.

B.B., No. 23804, marked by Mr. H. W. Robinson, at Ravenglass, Cumberland, on June 12th, 1911, as a nestling. Recovered near Tynemouth, Northumberland, on December 2nd, 1911. Reported by Mr. W. Wilson.

THE RANGE OF THE BRITISH SONG-THRUSH.

IN the first number of the *Club van Nederlandsche Vogelkundigen Jaarbericht*, Baron Snouckaert van Schauburg states (pp. 10, 11) that he has come to the conclusion, by careful comparison of specimens, that the Dutch-breeding Song-Thrush is the same as the British form separated by Dr. Hartert as *Turdus philomelos clarkei*. Baron Snouckaert also finds that the typical Song-Thrush (*T. p. philomelos*) occurs in Holland as a migrant. Interesting confirmation of these conclusions is afforded by Mr. P. A. Hens, who, in the same journal (p. 35), states that it is *T. p. clarkei* which breeds near

Roermond on the eastern border of Holland, though there it is rare, whereas in western and central Holland it is common. We may hope that further information as to the range of this bird on the Continent will be forthcoming, for it cannot be confined to Holland!

H.F.W.

BLACK REDSTART IN CARNARVONSHIRE.

ON November 23rd, 1911, I saw a Black Redstart (*Ruticilla titys*) on the Great Orme's Head. The bird was a female and very shy, resenting too close an approach, for so soon as it saw that I was paying particular attention to it, it flew away and I was not able to catch a second glimpse of it.

In Vol. IV., p. 308, of this Magazine, I recorded the first occurrence of this bird in Carnarvonshire, and I feel that the visitation of a second individual, particularly when, as at present, the number of records seem to prove that the species irregularly appears on the western seaboard, is worth recording.

R. W. JONES.

A POSSIBLE OCCURRENCE OF THE SPROSSER IN NORFOLK.

IN view of the rejection by Dr. Hartert and others of the Sprosser obtained at Smeeth, Kent, on October 22nd, 1904, and exhibited by Mr. M. J. Nicoll at a meeting of the British Ornithologists' Club (*Bull. B.O.C.*, XV., p. 20; Saunders, *B.B.*, I., p. 8), I have thought it might be of interest to put on record a specimen in my possession.

In December, 1908, Mr. L. Cullingford of Durham, gave me a supposed Savi's Warbler which he had found in an old case that he was breaking up. He told me that there was a label on the back of the case, giving the following data: "Savi's Warbler, Norwich, June 5th, 1845," together with some other writing that had become illegible. Unfortunately he had destroyed the label, after making a copy of it, together with the case, so that I did not see it.

The specimen was in a very dilapidated condition, and its appearance was quite in accordance with its supposed age, but Mr. Cullingford succeeded in making a passable skin of it. As I had then no acquaintance with Savi's Warbler, I accepted Mr. Cullingford's identification, and the skin lay in a cabinet drawer until August, 1910, when Mr. M. J. Nicoll recognized it as a Sprosser (*Daulias philomela*). On his visit to England last summer, Mr. Nicoll brought Egyptian examples of both Savi's Warbler and the Sprosser, and after careful comparison I am quite satisfied that my bird belongs to the latter species.

Of course, the history of the specimen is incomplete, but to me, at least, it bears an air of probability, and the likelihood of its being an escape at that date is much less than in the case of an example obtained within recent years.

I see no reason why this species should not occasionally visit our country, though the validity of any modern record must be tainted by reason of the possibility of the bird having escaped from confinement.

L. A. CURTIS EDWARDS.

A COLONY OF HOUSE-MARTINS BUILDING ONE NEST.

WITH reference to the notes which have recently appeared (*supra*, pp. 136, 190) in regard to a number of House-Martins (*Chelidon urbica*) feeding the young in one nest, I certainly think that these birds which assisted would not necessarily be the young of a previous brood from that nest. It seems a custom of House-Martins when they begin nest-building, to build the nests as quickly as possible, and I have seen a whole colony of fourteen birds set to work on *one* nest, and then when this was finished, to help with the others. I have noticed this on several occasions, and I think if naturalists take the trouble to watch the birds carefully when they are nest-building, this will be found to be the usual custom. I see no reason why birds which help one another in this way in constructing the nests, should not help in the same way in feeding the young. During the last four years I have had little opportunity of observing the birds, for the fairly large and increasing colony which was establishing itself on my home failed to return four years ago. It would, however, be interesting to have the notes of other well-favoured observers next spring.

OLIVER G. PIKE.

MIGRATION OF SLENDER-BILLED NUTCRACKERS.

IN SUSSEX.

IN connexion with the migration of these birds already reported (*supra*, pp. 191-2), I have to record a female shot at Brede, Sussex, on December 2nd, 1911. Upon opening the gizzard I found no trace of insect food, the contents consisting entirely of wheat. It was an example of the slender-billed form *N. c. macrorhynchus*.

H. W. FORD-LINDSAY.

IN FRANCE.

A GOOD many Nutcrackers, but of which form is not stated, are reported in the *Revue Francaise d'Ornithologie* for December, 1911 (pp. 207-8). Most of them are from northern

France, but others are from central and southern Departments, as follows : October 2nd, one, and within a fortnight three others, in Côte d'Or ; early October, one in Aube (the measurement of the bill of this specimen is given as 48.5 mm., which points to its being an example of *N. c. macrorhynchus*) ; October 15th-17th, two in Seine-et-Oise, and one in Seine Inférieure ; October 31st, one obtained and others heard of in Gard ; November 9th, one in Calvados.—H.F.W.

QUAIL IN NORFOLK IN WINTER.

As I have always understood that Quail migrated south in September, or at the latest early October, I am writing to inform you that I have a male Quail (*Coturnix communis*) in my possession that was taken at Methwold in Norfolk on December 12th, 1911, and I found no trace of its being wounded while I was skinning it.

H. EDWARDS.

[No doubt most of the Quail leave in October, but in mild winters they have been recorded fairly frequently, especially in western England, and they were practically resident in Ireland fifty or more years ago, but since they became scarcer in the British Isles there have been comparatively few records of winter occurrences.—Eds.]

LITTLE BUSTARD IN SUSSEX.

A FINE female Little Bustard (*Otis tetrax*) was shot at Beckley, Sussex, on October 21st, 1911, and is now in my possession.

J. B. NICHOLS.

SPRING DISPLAY OF THE STONE-CURLEW.

THE Stone-Curlew (*Edicnemus scolopax*) is generally plentiful in the north-east of Hampshire, but in 1911 they were in unusual numbers, and towards the end of April, on a piece of open fallow-land, where one or two pairs are always to be found in the summer, I had an opportunity of watching the display of a small flock during their mating period.

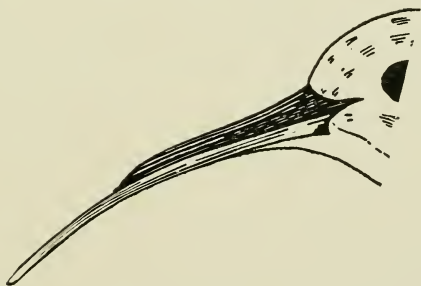
The cock-birds at intervals showed off in most curious attitudes before the hens, and directly one began his display he was followed closely by a clamouring group of admiring and excited females. He would run before them with extended neck and lowered head, which he frequently turned and twisted about in a grotesque manner; the feathers of the body were puffed out, the wings open and drooped, and the tail spread, sometimes upwards and sometimes downwards. After a while a bird so displaying would a'ways be brought near some other male, standing disconsolate and jealously

watching, and at him he would instantly rush. A furious fight would ensue, ending by his chasing the bird off the field. When chasing each other, they frequently hid among the scanty herbage, and it was amusing to watch the pursuer stretching himself to peer about in all directions, seeking his rival, and if he discovered him he would pitch into him, or if unable to see him would himself lie low until the other appeared from his concealment and made off as quickly as possible, to be soon discovered and chased beyond the arena. I watched two chasing each other for more than a quarter of a mile—always running, never flying. The victor then would hurry back to the hens, to find his place taken by another cock engaged in similar display, and he would, in his turn, perhaps be chased away. It was remarkable that they never took to flight, but always ran. And so these antics continued all the evening, until it was too dark to discern the birds, but their clamouring continued for some time longer.

PHILIP W. MUNN.

CURLEW WITH A MALFORMED BILL.

THE Curlew (*Numenius arquatus*), a sketch of the head of which is annexed, was shot in Norfolk during October, 1911. The upper mandible in this specimen was very little more than half



as long as the lower, but terminated in an apparently naturally curved point.

The bird was in very good condition, but it is a little difficult to understand how it obtained plenty of food.

CLIFFORD BORRER.

ICELAND GULLS IN SCOTLAND.

LEST the mention of an Iceland Gull (*Larus leucopterus*) as having occurred in the Flannan Isles (p. 202) in winter should lead your readers to think that the species is a rare one in the north of Scotland, perhaps it would be wise to

say that this is hardly the case. It occurs in Orkney every winter, sometimes in considerable numbers, but usually in the first or second plumages. H. W. ROBINSON.

[As mentioned in Vol. II., p. 329, winter occurrences of this species are too frequent to require special note, and its inclusion in the list above referred to was unnecessary.—Eds.]

MANX SHEARWATERS IN CUMBERLAND.

WITH reference to Miss Garnett's note under this heading in the last number (p. 197), I think that a fair number of Manx Shearwaters are washed up on the Cumberland shore. Mr. Smalley picked up the remains of one in my company on July 14th, 1911, near Seascale, and upon the few occasions I have traversed the small section of shore between Seascale and Ravenglass during the last few years, I have found four others, one of which when picked up was still alive.

There seems to be a regular migration down the Irish Sea during August, as pointed out by Mr. H. B. Booth in the *Zoologist* (1908, p. 429), and mentioned in your pages (Vol. III., p. 218). It is also stated by two other correspondents that they observed small migrating parties in July and early August respectively, but that seen by Mr. Booth at the end of August was a very large movement. H. W. ROBINSON.

[There is no doubt a very considerable southward movement down both coasts of Great Britain in August and September, but the observations recorded are too discontinuous to enable any definite conclusions to be drawn from them. It should be noted also that the bird is comparatively quite rare in British waters in winter.—Eds.]

FULMARS IN ORKNEY.

CONCERNING the note on Fulmars (*Fulmarus glacialis*) in Orkney and Shetland (*supra*, pp. 198-9), it may be interesting to note that even previous to 1891, when they were discovered nesting on Hoy Head, Fulmars used to pass the southern end of Orkney on migration northwards in considerable numbers from mid-February until early March, and this northward movement is still to be observed apart from the birds which stay to nest. As early as February 25th in 1905, numbers had already arrived on Hoy Head, and on March 5th in 1904 I saw scores of them on the Black Craig on the mainland near Stromness, and it is quite possible that some nest there also.

H. W. ROBINSON.

INTRODUCTION OF NUTHATCHES AND MARSH-TITS INTO IRELAND.—Mr. R. M. Barrington announces (*Irish Nat.*, 1911, p. 220) that he is informed that two or three dozen Marsh-Tits and a pair of Nuthatches have within the past two years been liberated in co. Tipperary. We have recently remarked on the "iniquity" of introductions of this kind, and we need not repeat our views upon the matter, except to say that we are more than ever convinced that such proceedings are contrary to the best interests of science. Mr. Barrington rightly says that it will now be impossible to decide with certainty the origin of any example of either of these species which may be found in Ireland. On page 28 of this volume we drew attention to a record by Mr. W. J. Williams, that he had seen a Nuthatch at Malahide in March last, but this must now be considered as due to importation.

LITTLE OWLS BREEDING IN LINCOLNSHIRE.—Mr. G. Bolam records (*Zool.*, 1911, p. 432) that the Little Owl (*Athene noctua*) has become "almost numerous" during the last two years in Lady Winchilsea's park at Haverholm, and breeds there. The first breeding record for Lincolnshire was, we believe, that by Capt. Stracey Clitherow (*supra*, p. 51), and it would seem that the bird has only just recently spread into Lincolnshire.

NIGHT-HERON IN YORKSHIRE.—Mr. T. Stephenson records (*Nat.*, 1911, p. 425) that an immature female *Nycticorax griseus* was shot on Ruswarp Carrs near Whitby on October 26th, 1911.

BARNACLE-GOOSE IN THE SOUTH OF IRELAND.—Mr. A. R. Nichols records (*Irish Nat.*, 1911, p. 220) that an example of *Bernicla leucopsis* was obtained early in October, 1911, near Kilmore on the south coast of Wexford. The Barnacle is chiefly known on the north and west coasts of Ireland and in Louth, and does not appear to have been recorded from the south coast previously.

LONG-TAILED DUCK IN SOUTH WALES.—A pair of *Harelda glacialis* of which the female was shot, are reported by Mr. M. A. Wright (*Field*, 9.XII.1911, p. 1289) from Margam Marshes, Glamorgan, early in December, 1911. The bird is very uncommon on the coast of Wales and in south-west England.

FLOCKING OF THE RED-BREASTED MERGANSER IN AUTUMN.—We have previously drawn attention to Major H. Trevelyan's notes on this subject (*cf.*, Vol. III., p. 167, Vol. IV., p. 193). The same observer now writes to the *Field* (21.X.1911, p. 923) that on August 15th, 1911, on the

same lake in co. Fermanagh, he saw two flocks of young birds, one of about twenty and the other of forty individuals, each attended by a single old bird. The flocks seemed to increase in size until, at the end of September and the first few days of October, "packs" of from twenty-five to three hundred birds were seen, and it was ascertained that in the case of two of the smaller flocks at all events, there was only one old bird in each. By October 11th the majority could fly well and had left the lake.

GUILLEMOT, LITTLE AUK AND PUFFIN INLAND.—Mr. O. G. Pike writes us that on November 22nd, 1911, a living Guillemot (*Uria troile*) was picked up in a lane in Winchmore Hill, Middlesex. It was in an exhausted condition, and died soon after capture. Mr. F. Boyes records in the *Field* (2.XII.1911, p. 1234) that a Little Auk (*Mergulus alle*) was picked up on November 24th, 1911, twenty miles from the sea on the wolds near Beverley (Yorks). Colonel J. H. Austen also records (*l.c.*) that his dog caught a Puffin (*Fratercula arctica*) in the New Forest (Hants.) on November 24th, 1911.

BLACK-NECKED GREBE IN WORCESTERSHIRE.—A wounded *Podiceps nigricollis*, a female, was caught on October 9th, 1911, in the canal at Stoke near Droitwich, and is recorded by Mr. T. Ground (*Zool.*, 1911, p. 434), who remarks that its stomach contained a number of its own breast-feathers, a few small pebbles, two or three univalve shells, a quantity of remains of beetles, and a red ant.

WADERS IN EAST RENFREW.—Mr. J. Robertson contributes some very interesting notes to the *Glasgow Naturalist* (Vol. IV., pp. 7-10) on Waders observed in the autumn of 1911 at Balgray Dam, an inland water in East Renfrew. A shortage of water caused much of the bottom of the Dam to be exposed, and thus an attractive feeding-ground for passing Waders was formed, and an exceptional number appeared to have visited it. Mr. Robertson thinks that these birds were crossing from the Forth to the Clyde. Among the birds seen, the following are worthy of special notice:—

CURLEW-SANDPIPER (*T. subarquata*).—A good many seen between August 26th and September 30th, the greatest number being a flock of twenty.

KNOT (*T. canutus*).—Flocks of twenty-four and ten seen between August 17th and September 24th.

RUFF (*M. pugnax*).—Several between August 17th and October 8th.

GREEN SANDPIPER (*T. ochropus*).—One or two on August 6th and two on August 13th. On p. 31 one is recorded from near Strathhaven (Lanark) about August 16th, 1911. The Green Sandpiper has only been recorded previously seven times in the Clyde area, and has hitherto been considered rare in western Scotland, though this may be for want of the careful observation now afforded by Glasgow ornithologists. It must, however, be remembered that the occurrences at Balgray Dam were probably exceptional, owing to the unusual lack of water.

BAR-TAILED GODWIT (*L. lapponica*).—One on September 27th.

BLACK-TAILED GODWIT (*L. belgica*).—Four from September 3rd to 10th, and two up to the 17th. On p. 20 two are reported by Mr. Galloway on September 17th from Troon north shore, in Ayrshire, and these are thought by the editors to have been two of the birds from Balgray Dam.

GREAT SNIPE (*G. major*).—One was shot near High Dam, Eaglesham, on August 23rd, 1911 (p. 18). Although annual in England, the Great Snipe is only rarely recorded from Scotland.



LETTERS



DUNLIN OR DUNLING.

To the Editors of BRITISH BIRDS.

SIRS,—I have lately had occasion to refer once more in the *Field* to the correct way of spelling the name of this bird, and I should like to have the opportunity of discussing the matter in your pages.

The form “dunlin” is doubtless that which is to be found in most works on British birds; but the question is, looking to the etymology of the name, and the oldest form of it, whether this is correct. I venture to think not, and for the following reasons:—

The meaning of the name “dunling” is the little dun thing, a diminutive akin to grayling, titling, sanderling, duckling, and gosling, and this is the spelling to be found in the oldest mention of the name, which occurs in the *Durham Household Book*, containing the accounts of the Bursar of the Monastery of Durham, A.D. 1530–4. The price then paid for these little birds, known elsewhere as stint, purr, sand-lark, and ox-bird, was at the rate of 4d. a dozen.

In an article on “English Bird Names,” published in the *Field* of January 12th, 1884, I took occasion to refer to what I conceive to be the proper spelling of the name dunling, and in the second edition of my *Handbook of British Birds* (1901) I explained more fully the reason for the change. This led to a correspondence with the late Professor Newton, who, with the concurrence of Professor Skeat, wrote me that he was convinced of the correctness of my view, and that he should adopt the spelling “dunling” when next he had occasion to mention the species in print. This he accordingly did in his *Ootheca Wolleyana*, Part 3, pp. 225–6, a fact which seems to have been generally overlooked. This, I venture to think, should settle the question, for no one will dispute the critical acumen invariably displayed by the late distinguished professor of zoology in all matters ornithological. Those who may feel any hesitation in adopting the more correct spelling will, in order to be consistent, have to consider the logical necessity for dropping the “g” in such names as titling, brambling, grayling, sanderling, duckling, and gosling, thereby providing in each case a veritable cockney termination.

J. E. HARTING.

[Although the proper scientific names to be used for a bird can be decided by following definite rules, the English name cannot, and must, we think, be chosen (if there is a choice) on the authority of the majority of scientific writers. Although we do not wish to dispute the etymological correctness of Mr. Harting’s “Dunling,” there can be no doubt that “Dunlin” is the form which has been used in the large majority of standard works, and we do not think this name should be changed. Professor Newton adopted the form “Cuckow” for the Cuckoo, but this has not found general acceptance, and there are many obsolete forms of spelling which might be revived if Mr. Harting’s argument were to find acceptance. If we may make a suggestion, we think that Mr. Harting would be far better advised if he were to agitate for priority in scientific names on scientific lines, rather than for priority in the spelling of colloquial names for which no dates are fixed nor rules in existence.—EDS.]

BRITISH BIRDS

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BREEDING AND "ECLIPSE" PLUMAGES OF THE COMMON PARTRIDGE.

BY

W. R. OGILVIE-GRANT.

AT a meeting of the British Ornithologists' Club, held on December 13th, 1911, I exhibited a series of examples of the Common Partridge (*Perdix perdix*), to illustrate two remarkable seasonal changes of plumage which occur in the male and female, and which had not hitherto been recorded. Firstly, the male Partridge, during the autumn moult, which lasts from July to the beginning of September, assumes a partial eclipse-plumage on the sides of the head and on the neck, a peculiarity first pointed out to me by Mr. G. E. Lodge. This plumage consists of light umber-brown feathers with very narrow, buff shaft-stripes, finely bordered with black; *it replaces for a period of some two months* the normal feathers, which are grey, finely waved with black (Figs. 1 and 2).

The head and neck being the last portions of the bird to renew their feathers, it is a common occurrence to find old males, in the early part of September, with the sides of the head and neck still retaining the eclipse-plumage. Such specimens are frequently mistaken by sportsmen for very "forward" young birds. The remains of the first plumage on the sides of the neck in birds of the year are, however, very different from the eclipse-plumage of adult males, the former being sandy-brown with much wider and more distinct buff shaft-stripes. The feathers of the immature plumage are, moreover, much longer and more pointed than the eclipse-feathers of the adult.

While examining female Partridges to ascertain whether they also assumed an eclipse-plumage, I made the remarkable discovery that the hen bird attains a partial *breeding plumage* on the sides of the head, as well as on the neck and upper-mantle, many of the normal feathers being replaced in the month of May by sandy-brown feathers irregularly mottled or barred with black, with a buff

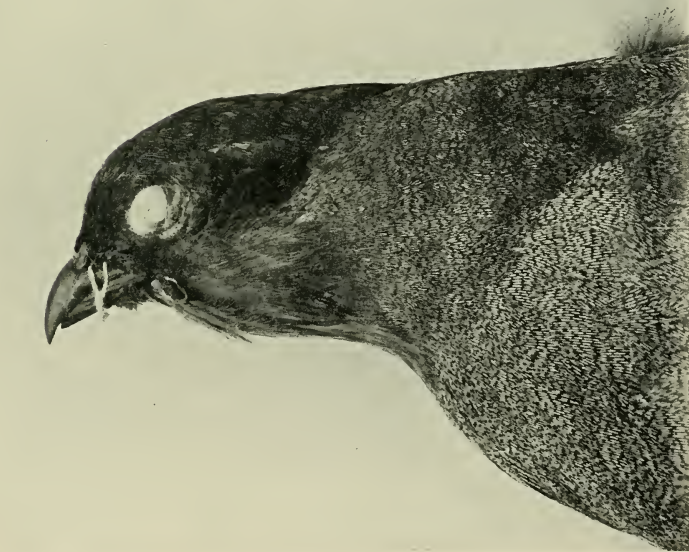


FIG. 1. MALE IN WINTER-PLUMAGE, NOVEMBER.

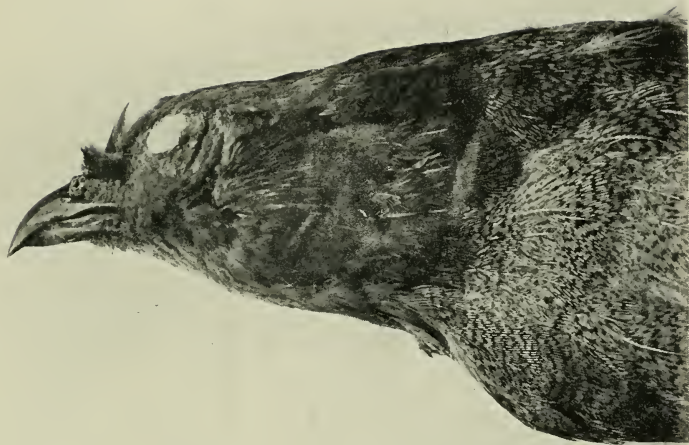


FIG. 2. MALE IN ECLIPSE-PLUMAGE, AUGUST.

shaft-stripe and usually also a buff subterminal spot. In many specimens the breeding-plumage forms an irregular necklet and produces a very mottled appearance on the head and neck, which is doubtless highly protective to the sitting female (Figs. 3 and 4).

These spotted feathers are retained till September, and are often plainly visible in old females shot in the early part of that month. That these very interesting plumages have hitherto been overlooked, is no doubt due to the fact that it is most difficult to obtain specimens killed in the "close" season; and I greatly hope that other ornithologists will assist in looking further into this matter, as it is still uncertain in what month of the year the female begins to assume her partial breeding-plumage.

The pair of Partridges exhibited with their nest at the Natural History Museum were taken in the beginning of June, and the female shows the spotted breeding-plumage fully developed on the sides of the head and neck. Males shot at the end of May and in June prove that at that season their plumage remains unchanged, but has become much faded and worn. The feathers of the upper-parts of the body are quite grey from wear and exposure, all the rich brown tints of the mantle, back, etc., having disappeared; the wings, too, are much paler, and the conspicuous shaft-stripes of the coverts are almost white. The chestnut on the head and throat has also become pale dull rust-colour. At that season (May to June) *male examples from the British Isles are greyer than the greyest examples from north Russia* killed in autumn and winter—an interesting point which has not hitherto been recorded.

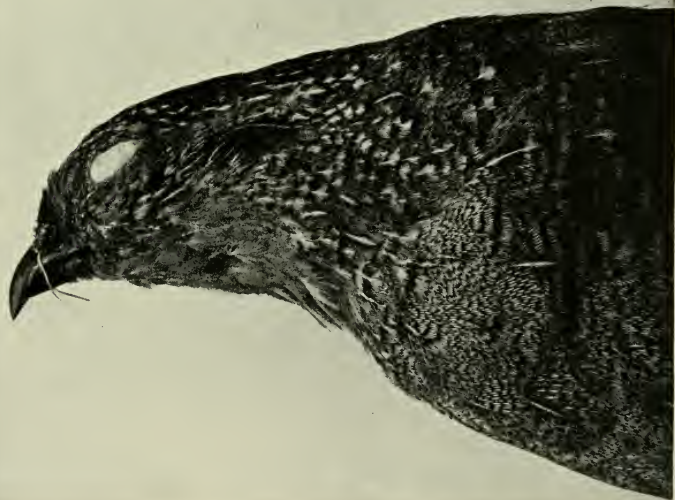


FIG. 3. FEMALE STILL RETAINING BREEDING-
PLUMAGE, AUGUST.

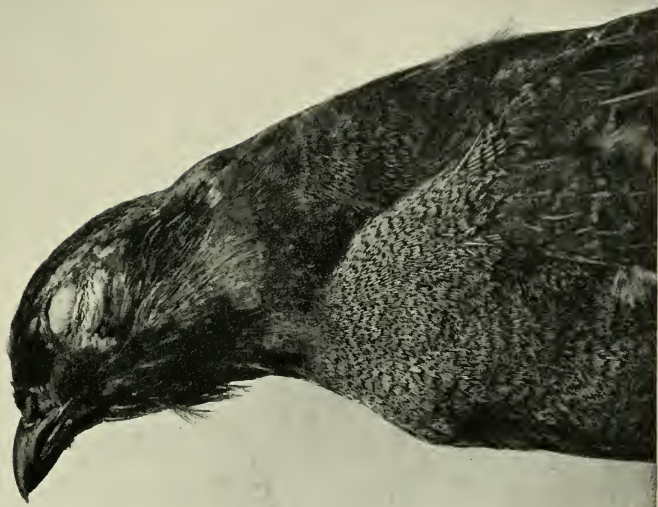


FIG. 4. FEMALE IN WINTER-PLUMAGE,
NOVEMBER.

THREE NEW BRITISH BIRDS.

THE COLLARED FLYCATCHER, *Muscicapa collaris* Bechst.,
IN SUSSEX.

ON May 12th, 1911, a male Collared Flycatcher (*M. collaris*) was shot in Udimore Lane, near Winchelsea, and another male at the same place next day, May 13th, 1911, both in good plumage. This Flycatcher was included by Gould in the British list, but I believe these are the first specimens with authentic data.

J. B. NICHOLS.



ADULT MALE COLLARED FLYCATCHER, SHOT NEAR WINCHELSEA,
SUSSEX, MAY 12TH, 1911.

By the kindness of Mr. Nichols we are able to give a photograph of one of the specimens to which he refers. It should be remarked that Gould's record was most unsatisfactory, being founded on his *recollection* of a specimen in a taxidermist's shop, and has never been accepted.

The adult male Collared Flycatcher is easily distinguished from the Pied Flycatcher by its conspicuous white "collar," which completely encircles the base of the neck. The white spot on the forehead varies in size, but is larger than that in the Pied Flycatcher. The Collared Flycatcher has also a greyish-white rump, and the primaries have a conspicuous white patch showing beyond the primary-coverts. The outer pair of tail-feathers usually have white on the outer web, and only very rarely is there white on the next pair. In young males and females the distinctions are not so easy, but there is usually a slight indication of the collar, and the white spot on the primaries is distinctive, while the second primary is slightly longer than the fifth, instead of being slightly shorter or equal to the fifth, as in the Pied Flycatcher.

The Collared Flycatcher breeds in Austrian Poland, Austria, Hungary, southern Russia, south, and parts of middle, Germany (but is very rare in north Germany), south-east Europe generally (but in Greece is apparently only a migrant), very local in France, Belgium, Holland, and Italy, and possibly in some Mediterranean islands and Spain. On passage it occurs in most parts of Europe, Persia, Asia Minor, and Palestine, while it winters in Egypt.

THE PINE-BUNTING, *Emberiza leucocephala* S. G. Gm.,
AT FAIR ISLE.

IN the first number of the *Scottish Naturalist*, formerly known as the *Annals of Scottish Natural History*, Mr. W. Eagle Clarke announces the occurrence of a male Pine-Bunting (*E. leucocephala*) at Fair Isle on October 30th, 1911. The bird was noted as a stranger amongst a rush of migrants by Mr. Wilson the "Bird-watcher," and was procured and forwarded to Mr. Clarke (*Scot. Nat.*, 1912, p. 8).

The male Pine-Bunting in winter-plumage is somewhat like a Yellow Bunting with the yellow replaced by white, but the entire throat, cheeks, sides of the neck and upper-breast are chestnut, though this colour is

much obscured by the grey fringes of the feathers, as is a white spot at the base of the throat. The belly is white as well as the flanks, the latter being streaked with chestnut. The centre of the crown is greyish-white, and the rest of the upper-parts are much like those in the Yellow Bunting, but are more chestnut, not so yellowish. In summer the bird becomes markedly different by the abrasion of the feathers. The throat, lores, and a streak over and behind the eye becoming rich chestnut, ear-coverts white, centre of the crown white, and the rest of the top of the head black. A broad patch of white at the base of the throat is conspicuous, and the chestnut on the upper-breast and flanks as well as on the upper-parts is very much brighter, owing to the wearing off of the grey tips of the feathers.

The female more nearly resembles that of the Yellow Bunting, but the yellow on the under-parts (including axillaries and under wing-coverts) and top of the head, is replaced by greyish-white, and the upper-breast and flanks are marked with chestnut.

The Pine-Bunting breeds from west Siberia (Ural) to east Siberia, and migrates to China, Mongolia, Turkestan, and casually to Europe (Italy, Dalmatia, Russia, south France, Austria, Heligoland).

THE THRUSH-NIGHTINGALE, *Luscinia luscinia* (L.)=
Daulias philomela auct.

IN our last number Mr. L. A. C. Edwards gave us a record of a Thrush-Nightingale or Sprosser (*supra*, p. 224), which must, we think, be considered as a very doubtful one, as there is no certainty that the locality marked on the case really referred to the bird which was found in it. The specimen obtained at Smeeth (Kent) on October 22nd, 1904 (*cf.* Vol. I., p. 8) has been considered as a doubtfully genuine migrant, owing to the late date of its occurrence. Dr. Hartert showed at the time that the bird left its breeding-places in August and early September. Nevertheless it may have been a belated migrant.

We now have, however, an occurrence recorded by Mr. W. Eagle Clarke (*Scot. Nat.*, 1912, p. 9), which must be regarded as that of a genuine migrant. This example arrived in company with a crowd of migrants at Fair Isle on May 15th, 1911.

The Thrush-Nightingale differs from our Nightingale chiefly in the considerably more brownish, less rufous, colouring of its upper-parts; in the breast and sides of the throat being mottled with greyish-brown; and in the first (bastard) primary being very small and narrow, and only about half the length of the primary-coverts, whereas in our Nightingale it is much larger, and usually considerably longer than the primary-coverts.

The Thrush-Nightingale breeds in south and middle Sweden, south Finland, Denmark, a narrow belt along the Baltic in north Germany, north-east Germany generally, Galizia, Trans-sylvania, Roumania, Russia east to the Ural (Orenburg), and south-west Siberia to the Altai. It is casual and rare in west Europe, and winters in east Africa.

With regard to its scientific name, there can be no doubt that Linnæus referred to the Thrush-Nightingale and not the Common Nightingale under the name "*Motacilla lusciniæ*," and that the Thrush-Nightingale must be called, by the International Rules, *Luscinia lusciniæ*, and our Nightingale *Luscinia megarhynchos*. We are extremely glad to note that Mr. Eagle Clarke follows the Rules, and calls the Thrush-Nightingale *Luscinia lusciniæ* (*Scot. Nat.*, 1912, p. 9). It is unfortunate that the name *lusciniæ* must be transferred from our Nightingale to the Thrush-Nightingale, but unless the Law of Priority is strictly adhered to, it will be quite impossible to attain to uniformity. So long as individual choice is allowed and departures from the Rules are made, then so long will uniformity be delayed. That uniformity is our greatest need, and that this can only be reached by strict adherence to International Rules is our firm conviction, and we sincerely congratulate Mr. Eagle Clarke on his action, by which the Law of Priority is recognized in an important case.—EDS.

NOTES

UNCOMMON BIRDS ON THE SOUTH-EAST COAST OF NORTHUMBERLAND.

SHORE-LARK (*Otocorys alpestris*).—On October 28th, 1911, while walking along the sea-banks south of Cresswell Point, my brother and I observed a very fine mature bird. It was very tame and would not leave a small pool of water close by the high road. On October 30th, S. G. Charlton watched closely a small flock passing south along the shore near Cullercoats. From what records I have, only five specimens have been previously recorded for this part of the coast.

LITTLE OWL (*Athene noctua*).—On October 16th, 1911, a bird of this species was found by a Mr. White in his back-yard, at Whitley Bay. It had evidently struck against the telegraph-wires above, during the heavy south-east gale experienced the night before. On being placed in a cage it had recovered by the following morning, and was given an opportunity to escape. However, instead of doing so it remained and was allowed to fly round the yard, returning at night to the cage. It was an adult specimen and fairly tame, sitting contentedly on the hand. It suffered an injury however, and died in December. Unfortunately its sex was not determined. To all appearances it seems evident that it was a true migrant, and is, I think, the only specimen recorded for Northumberland.

ROUGH-LEGGED BUZZARD (*Buteo lagopus*).—Mentioned by John Hancock as one of the rarest of the Falconidæ in Northumberland (1874), this species may now be said to be of almost yearly occurrence on this part of the coast. An immature female was shot in October, 1911, near Whitley Bay.

GREY PHALAROPE (*Phalaropus fulicarius*).—An adult male in winter plumage was shot by H. V. Charlton at the mouth of the Lyne, near Cresswell, on October 10th, 1911. It was observed swimming about, twenty yards from shore and was exceedingly tame. It is of interest to mention that in former years two have been obtained at this identical spot.

FULMAR (*Fulmarus glacialis*).—H. V. Charlton picked up the much-decomposed remains of an adult on the shore at the mouth of the Lyne at Cresswell, on October 16th, 1911. Again on October 30th, a mature specimen of the light phase

was observed on the shore at Whitley Bay in a sick condition, and being easily caught was kept alive for a day, and afterwards brought to me. The carcase was sent to Dr. N. F. Ticehurst who pronounced it a male and stated: "I could find no adequate cause for death, i.e. no disease or gross injury. The stomach contained a small quantity of bright green vegetable substance, much macerated, perhaps *Zostera*. I should think that a Fulmar must be very hard up for food to pick up this, and coupled with the entire absence of internal fat, it rather suggests that the bird died of exhaustion during the recent gales." Previous occurrences in this district number only two.

J. M. CHARLTON.

[We can but think that the Little Owl recorded had escaped from captivity, otherwise it would not have returned to the cage when set at liberty.—EDS.]

RECOVERY FROM INJURY IN BIRDS.

IN most cases of severe injury to birds, not of itself fatal to life, the sufferer probably falls a victim to one or other of its natural enemies during the consequent period of debility. A Lapwing (*Vanellus vulgaris*), however, which I recently obtained, showed that such is not always the case. Although this bird had some time previously had its left tibia fractured about the middle of the shaft, and the whole limb completely amputated at the upper third of the metatarsus, yet it had recovered completely from these injuries, and was in good condition. The healed stump presented a somewhat "clubby" appearance, and the union of the fracture (a comminuted one, as one might expect) was strong and without a great amount of deformity. The terminal joint of the right third toe was also missing.

M. WINZAR COMPTON.

BLACKCAP WINTERING IN SOMERSET.

ON January 14th and 15th, 1912, two boys reported to the Rev. W. L. Mackennal, of Dunster, Somerset, that they had trapped a Blackcap (*Sylvia atricapilla*), but the bird was released before he saw it. On the morning of the 18th, Mr. Mackennal's cat brought in an injured, but living, male Blackcap, which I received on the 19th. As it is seldom possible to examine a British-taken Blackcap in winter dress, I give the following particulars: Crown black, with a slight rusty tinge; nape, ear-coverts, throat, and breast olive-grey (Ridgway); back olive-buff; wings and tail olive-brown to hair-brown, primaries paler on the anterior edge; chin only slightly paler than throat, but the grey on the upper-breast

shading to a dirty-white on the lower-breast; belly dirty-white, distinctly suffused with pale yellow, axillaries also showing this distinct yellow tinge; bill black on upper mandible, bluish-horn on lower mandible; legs and feet lead-grey; irides hazel.

T. A. COWARD.

PIED FLYCATCHER IN ANGLESEY.

UP to the time when the *Vertebrate Fauna of North Wales* was published, there was no record of the Pied Flycatcher in Anglesey. Mr. F. H. Mills informs me that one day in the early summer of 1910 he saw a male of this species (*Muscicapa atricapilla*) in Cadnant Wood, close to Menai Bridge, and watched it for a considerable time. As the bird is common in the wooded parts of Carnarvonshire across the Straits, it is not surprising that one should occur in the belt of woodland along the opposite shore, which is practically the only suitable tract of country in Anglesey. Nevertheless, an actual record is interesting and valuable. H. E. FORREST.

MIGRATION OF SLENDER-BILLED NUTCRACKERS.

ON THE CONTINENT.

THE following notes are extracted from an article by Ritter von Tschusi zu Schmidhoffen in *Urania* (No. 49, pp. 866-9), kindly sent to me by the author.

The first appearance of Nutcrackers is recorded from the Russian Baltic Provinces and Kurland. Here they appeared towards the end of July, became very numerous towards mid-August, but had diminished in numbers at the beginning of September.

A flight of thirty to forty was observed in west Prussia towards the end of July, which appears to have dispersed westward in August and September. It is remarkable that no occurrence was reported from east Prussia till the end of August. From Pomerania and Mecklenburg the first records date from the beginning of the second half of September, and about the same period for Prussian Silesia and Hanover (E. Friesland). By the end of the month they had reached Mark Brandenburg, and about the beginning of October were reported from Bavaria, Elsass, and Westphalia.

In Austro-Hungary the first records date from the last ten days of September, when they appeared in Bohemia; in numbers in Lower and Upper Austria, and singly in Croatia and Dalmatia; while at the beginning of October they were recorded from south Styria.

F. C. R. JOURDAIN.

SPREAD OF THE LITTLE OWL

IN BERKSHIRE, NORFOLK, AND LINCOLNSHIRE.

As this bird appears to be spreading all over England, it may be as well to record localities where I believe it has not been previously observed: Merton Hall, Norfolk—one seen October 6th, 1911; Park Place, Henley, Berkshire—one on December 26th, 1911.

With reference to the note on page 229, I have known of the Little Owl being present and breeding in Lincolnshire, at Harlaxton Manor, near Grantham, for several years, and I also saw it at Witham Hall, Bourne, five years ago.

HEATLEY NOBLE.

IN YORKSHIRE.

It is reported in the *Naturalist* (1912, p. 21) that a pair of Little Owls were shot at Leconfield on October 3rd and 5th, 1911, the female "evidently having performed the duties of incubation."

IN SHROPSHIRE.

DURING a shoot at Peplow on December 28th, 1911, two birds were flushed which flew off. Thinking they were Woodcock, one of the guns fired and brought down one of the birds. On examination it proved to be a Little Owl (*Athene noctua*), and it is being preserved to add to the Hawkstone Collection now at Peplow Hall. H. E. FORREST.

MONTAGU'S HARRIER IN BERKSHIRE.

THROUGH the kindness of Sir Gilbert Clayton East, Bart., of Hall Place, Maidenhead, I have recently been shown a very interesting specimen of a male Montagu's Harrier (*Circus cineraceus*) killed on his property in September or October, 1870. This bird is of the *dark* variety; in fact, I am assured by the owner that when first killed it was sooty-black, though now faded to a uniform dark brown. The only light markings noticeable are seen when the tail is examined from below. The bars are then distinct, but when examined from above they are indistinct. This is the second record I have of a Montagu's Harrier killed in Berkshire. I shall be very glad to know if the dark variety has ever previously been found in England.

HEATLEY NOBLE.

[In Yarrell, 4th ed., Vol. I., p. 143, it is remarked that the dark brown or black variety "has several times been killed in this country." On consulting the county avifaunas we find mention of specimens from Devon, Cornwall, Dorset, Hampshire, Kent, Suffolk, Norfolk, and Northumberland.—EDS.]

BARNACLE-GEESSE ON THE SOUTH COAST OF IRELAND.

ON page 229 of the present volume I find it stated that the Barnacle-Goose (*Bernicla leucopsis*) does not appear to have been recorded from the south coast of Ireland previously to the specimen announced by Mr. Nichols. In the *Zoologist* for 1890, p. 103, Major Barrett-Hamilton wrote: "Mr. Gibbon mentioned two (Barnacles) which were shot in Tacumshin in 1888, and I heard of others. It is known to the fowlers as the 'King' or 'White-headed Barnacle.'" Tacumshin is a large tidal lagoon, on the south coast of co. Wexford. The late Dr. Burkitt of Waterford preserved a fine old male bird in 1869, whose history is thus given by him: "This bird some five winters ago (*circa* 1864) was driven by storms on Tramore Back Strand in company with another male bird of the same kind. These birds, meeting with a flock of tame Geese, went with them into the outhouse of a farmer in the vicinity. They became afterwards tame, and were purchased by Mr. Rogers of Tramore, who had them on a small pond. They were in the habit of flying a short distance and returning to the pond regularly. This bird, after his five years domestication, was killed by a dog, 20th November, 1869."

I have heard of other instances in which wild-geese (White-fronted and Snow-Geese) were decoyed or tamed by means of the attraction of domestic geese.

I have failed to obtain any record of the Barnacle-Goose from west Waterford or any part of Cork.

The south coast of Ireland is described by Mr. Barrington as extending from near the Barrels Light-ship in Wexford to Crookhaven in west Cork, and Kerry is relegated to the west coast. I may mention three cases of Barnacles in the latter county, as it is so far south. In the books of Messrs. Williams and Son of Dublin I find one Barnacle was sent them from Valentia in 1901, and three others from Cahirciveen in 1896; then again Mr. A. J. P. Wise, who used to shoot in Kerry, saw a "gaggle" of these birds on the shore of Caragh Lake, in winter, between 1880 and 1887.

The main migration of Barnacles is by the islands of Donegal and Mayo, where they feed. I have found their remains on Davilaun and Frehil, and flocks feed on Clare Island. Most visitors to Ireland from northern and arctic countries, e.g. the Mealy Redpoll, Snow-Bunting, Snowy Owl, Greenland Falcon, Rough-legged Buzzard, Whooper, Bewick's Swan, Snow-Goose, Barnacle-Goose, Long-tailed Duck,

Woodcock, Glaucous and Iceland Gulls, and Slavonian Grebe, arrive on the north coast of Ireland; one contingent comes down the east coast; but the greater number go down the west coast, many reaching Kerry, while a few straggle to Wexford, and fewer still to the south coast of Ireland.

R. J. USSHER.

BARNACLE-GOOSE IN ANGLESEY.

As the Barnacle-Goose (*Bernicla leucopsis*) is nowadays comparatively rare in North Wales, it may be worth mentioning that one of these birds was seen on the big bog at Llanerchymedd on November 27th, 1911, by Mr. F. H. Mills, who reported it to me.

H. E. FORREST.

GADWALL IN PERTSHIRE.

A VERY fine male Gadwall (*Anas strepera*) was shot at Cromlix, near Dunblane, on December 28th, 1911. This is the first record I have for the district, though there is some evidence that at least one pair have bred within thirty miles.

HEATLEY NOBLE.

FERRUGINOUS DUCKS IN SUSSEX.

ON January 2nd six Ferruginous Ducks (*Fuligula nyroca*) were observed on the flooded marshes at Crowhurst. The same evening two were obtained, a male and female, both of which I saw in the flesh. Owing to the recent heavy rains, the whole of the marshes in Sussex are at the present time under water, and afford good feeding-grounds for duck. Most of the common species have been taken in some numbers, also a few geese.

H. W. FORD-LINDSAY.

LONG-TAILED DUCK IN ANGLESEY.

MR. A. Geoffrey Leigh kindly sends me word that he has recently had through his hands a Long-tailed Duck (*Harelda glacialis*) shot on November 23rd, 1911, on Malldraeth Bay, Anglesey. It was in immature plumage, but proved on dissection to be a male.

H. E. FORREST.

FLOCKING OF THE RED-BREASTED MERGANSER IN AUTUMN.

REFERRING to the note on p. 230 of the January number of BRITISH BIRDS, in which attention is drawn to my communication on flocking of young Mergansers which appeared in the *Field* of October 21st, 1911, where it is stated that by October 11th, in the opinion of my boatman, the majority of these birds had left a certain lake in co. Fermanagh, this

opinion was evidently arrived at on insufficient observation' for, writing again under date October 23rd, the same man states that on the previous day he had seen two packs of these birds, one of which he estimated at over 500, and another pack up to about 300 in number. As to the composition of these packs—whether they consisted of young or old birds, or a mixture of both—he could say nothing, as they were all able to fly well, and were at no time nearer to him than about two hundred yards. Under date November 19th he wrote, "There is not a Merganser to be seen on the lake."

HERBERT TREVELYAN.

GOOSANDERS IN CARNARVON.

ON December 25th, 1911, at Lyn Ogwen (Carnarvon), I watched a male Goosander (*Mergus merganser*) for some time at long range, swimming on the lake there. On the 27th it was joined by a female, and both birds were watched carefully for a long period. They landed on the remote shore of the lake to preen their feathers, the red feet being then very distinct through the glass.

Although the Goosander is not uncommon on the coasts of north and north-west Wales and the upper Dee according to Mr. H. E. Forrest, its occurrence on the Carnarvon lakes seems to deserve record.

C. H. WELLS.

SANDERLING AND GOOSANDER IN BEDFORDSHIRE.

I HAVE just been shown a Sanderling (*Calidris arenaria*) shot at Marston, Bedfordshire, this morning (January 16th, 1912). There have been several previous records for this county, but it is a long way inland for this bird to come.

An adult male Goosander (*Mergus merganser*) arrived on the Woburn Ponds on January 1st, and is still here. Goosanders have been regular winter visitors during the last three years, having been attracted apparently by our single pinioned male.

Since I wrote the above two more male Goosanders have arrived on the Ponds.

M. BEDFORD.

A DISTINCTION BETWEEN YOUNG AND OLD RED-LEGGED PARTRIDGES.

ALTHOUGH it has long been known that the pointed primary in a Partridge (*P. cinerea*) denotes a bird of the year, I have only recently been shown the difference between old and young Red-legged Partridges (*C. rufa*). At the tip of the inner web of the first primary in young birds will be found

a light-coloured speck. In the old birds this speck is wanting. It is believed that this distinction is constant. The same feather in the old bird is more rounded than in the young, although this characteristic is not nearly so apparent as in the Grey Partridge. I have never handled a Red-legged Partridge after the shooting season, and cannot say if the spot mentioned above is lost by abrasion or not.

HEATLEY NOBLE.

GREEN SANDPIPER IN SUTHERLANDSHIRE.

IF the Green Sandpiper (*Totanus ochropus*) is rare in the west of Scotland, it may be worth recording that on June 24th, 1910, I had a good view of one on the rocks below the hotel at Rhiconich, Sutherlandshire. H. G. ALEXANDER.

[The Green Sandpiper has very rarely been recorded in the north of the Scottish mainland, although it has been noted as a fairly regular migrant in Fair Isle during the last few years.—EDS.]

BLACK-TAILED GODWIT IN NORTH LANCASHIRE.

ON December 9th, 1911, I saw in the flesh a Black-tailed Godwit (*Limosa belgica*) which had been shot that morning near Glasson Dock, at the mouth of the Lune, north Lancashire, by a man named T. Lamb.

The last time this bird was identified in north Lancashire was on January 22nd, 1898, when a pair were shot in the Lune Estuary, and passed into the possession of Mr. F. Smalley. In Mitchell's *Birds of Lancashire*, the only records are two shot near St. Michael's-on-Wyre, the one a male on September 23rd, 1873, and the other, which was one of three seen, on September 12th, 1882, and another from the Formby shore.

I cannot agree with the statement made by the same author on the authority of one man, a wildfowler in the Lune Estuary—whom I have interviewed with unsatisfactory results—to the effect that he sees the species there every autumn in small numbers. The dates of the last two records are interesting as being in mid-winter.

I take it therefore that the above bird is only the fifth record of the species for Lancashire, and also think I am right in saying that this is the first time the 1898 specimens have been recorded except in the local Press.

The last specimen was a female, and almost adult.

H. W. ROBINSON.

BLUE EGGS OF TERNS AND GULLS.

WITH reference to the notes on the blue eggs of Common Terns and Black-headed Gulls, may I be allowed to point out that in many of these varieties the surface of the egg is as glossy as in the more usual types and that the shell is up to the average in thickness; also that the blue eggs are not the only conspicuous varieties?



NEST OF SANDWICH TERN.
(*Photographed by E. B. Dunlop.*)

The Rev. F. C. R. Jourdain overlooks the fact that it is from the Gulls themselves that the eggs have primarily to be protected; if the birds did not sit on the eggs as soon as laid, every variety at all conspicuous would immediately be taken by the Gulls.

That there is a certain amount of local variation in the colouring of the eggs in different colonies is highly probable. A somewhat similar case is that of the songs of some species of birds, which are known to have distinct characteristics in different localities.

The Sandwich Tern illustrates the protective value of the covering of the eggs by the bird from the time the first is laid, very plainly. The eggs of this species are conspicuous, and I have known as much as a week to elapse between the hatching of the two eggs in a clutch; if the first laid had not been covered by the bird, the Gulls would have destroyed it long before the seven days had elapsed for the completion of the clutch. Another point worthy of notice is that this species voids the *fæces* from the nest, and the surrounding "white-wash" draws attention still more strongly to the already conspicuous eggs (see photograph). The Common and Arctic Terns (the latter also incubates from the deposition of the first egg) have the same habit, but in a much lesser degree. The Little Tern, however, which sometimes depends for the protection of its eggs upon their coloration alone, does not possess this habit, and the same is the case with such species as the Ringed Plover, Oyster-catcher and Lapwing, which rely upon protective coloration for the safety of their eggs.

ERIC B. DUNLOP.

REFERRING to the notes on pages 169 and 196 on the above subject, it may be of interest to state that in 1904 I found three perfectly spotless pale-blue eggs of the Black-headed Gull (*Larus ridibundus*) in one nest on an islet of Lough Mask, co. Galway, Ireland.

In the same season I saw two eggs of the Arctic Tern (*Sterna macrura*) as spotless (and another with only two minute black spots), in nests on the shingle at Killala Bay, co. Mayo, Ireland.

The three eggs of the Black-headed Gull were all in one nest: those of the Arctic Tern were in different nests, accompanied in each case with normally coloured eggs.

HUGH S. GLADSTONE.

[Single blue eggs occur so frequently among most species of terns and gulls as not to be worthy of separate records. In the case of the Black-headed Gulls, clutches of three blue eggs have been found on many occasions, and most large collections of British birds' eggs contain examples of this type. Although the white-grounded eggs with blotches of dark markings almost always show signs of defective shell construction, this is not always, as Mr. Dunlop points out, the case with blue eggs, which at times only lack the surface markings and are otherwise perfect.

As the habit of sitting on the eggs as soon as laid is common to all colonies of both species, it can have no effect on the presence or absence of these varieties in different colonies of the Black-headed Gull or Common Tern. The appearance

of several *clutches* of blue eggs in a colony of Common Terns where such an occurrence was previously unknown must be due to some other cause, and the absence of variation in some colonies of the Black-headed Gull and its presence in others, seems to show that there is a variable factor in the case, such as the existence or non-existence of protection, though of course it is not necessarily due to this cause.—F. C. R. JOURDAIN.]

POMATORHINE SKUA IN NORTH LANCASHIRE.

It may be interesting to note that I received in the flesh on November 13th, 1911, a specimen of the Pomatorhine Skua (*Stercorarius pomatorhinus*) which had been shot on November 10th, 1911, in the Lune Estuary, north Lancashire, close to the place where Mr. Smalley's specimen was killed with a stone on November 28th, 1908, as mentioned in BRITISH BIRDS (Vol. II., p. 313). My specimen is an immature female, but not a bird of the year, being, I take it, in its third plumage, for its throat is pure white, as are the under-parts with the exception of the abdomen—which is sooty-black with some of the feathers tipped with grey—and the pectoral band, which is formed by small irregular brown blotches at the extremities of some of the feathers. The flanks also bear a few similar markings, whilst the straw-coloured acuminate feathers are just making their appearance on one side.

H. W. ROBINSON.

LITTLE AUK IN SHROPSHIRE.

ON December 26th, 1911, a Little Auk (*Mergulus alle*) was found dead on Hatton Farm near Church Stretton, Shropshire, and sent to me for examination. The weather at the time was not particularly stormy. Several others have been recorded in the county in winter, the last previous occurrence being on one of the Ellesmere lakes in November, 1884. Strange to say, the visitation of Little Auks to this country during 1895-6 did not affect Shropshire, not one, apparently, wandering thus far westwards.

H. E. FORREST.

MADEIRAN FORK-TAILED PETREL IN HAMPSHIRE.

My friend the Rev. J. E. Kelsall has sent me a specimen of the Madeiran Fork-tailed (or Harcourt's) Petrel (*Oceanodroma castro*), which was picked up dead on the beach at Milford, Hampshire, by Mr. Roland Follett on November 19th, 1911.

Mr. W. R. Ogilvie-Grant has kindly named the specimen for me.

Dr. N. F. Ticehurst, in his *History of the Birds of Kent*, says "the only two specimens of this species hitherto recorded from the British Isles were obtained in Kent," but possibly some of the specimens which have been already recorded as *Oceanodroma leucorhoa* may be of this Madeiran species.

PHILIP W. MUNN.

LITTLE DUSKY SHEARWATER IN SUSSEX.

ON October 27th, 1911, a Little Dusky Shearwater was picked up on the beach near St. Leonards-on-Sea. Upon dissection it proved to be a female.

This makes the fifth example for the British Isles. As in previous cases, the bird was washed ashore after strong south-westerly gales, which during October were of unusual severity.

H. W. FORD-LINDSAY.

[Mr. J. B. Nichols, in whose collection is the above-mentioned bird, has kindly allowed me to examine it, as well as another specimen (male) picked up at Pevensey Sluice on November 15th, 1911. I have also been able to compare these two with the male caught near Lydd on November 27th, 1905 (*cf.* Vol. II., p. 373), which is also in Mr. Nichols's possession. They are all of the Madeiran race, which was separated by Messrs. Rothschild and Hartert from the east African form under the name of *Puffinus obscurus atlanticus* (*Bull. B.O.C.*, XXVII., p. 43, 1911). But Dr. J. A. Allen, in reviewing Dr. Godman's *Monograph of the Petrels*, in the *Auk* (1908, p. 339), perceiving from the literature that the Madeiran bird was distinct, had already proposed for it the name *Puffinus godmani*, and this name, of course, has priority over *atlanticus*. The east African form is *P. obscurus bailloni*, and differs from *P. o. godmani* by the lores being dark instead of white, and by the patch on each side of the breast being larger and darker brown, not so grey as in *P. o. godmani*. The name *assimilis* is restricted to the Australian race.—H.F.W.]

SHEARWATERS IN THE BAY OF BISCAY AND THE ENGLISH CHANNEL.

As several notes have appeared recently with regard to the migration of Shearwaters, it may be worth while recording some observations I made in September, 1911. In that month I went by boat from London to Bordeaux, and returned three weeks later. On the 5th we were in the Channel, and although we had passed the Channel Islands before dark, I saw no Shearwaters. We were well into the Bay on the morning of the 6th, and I saw some Great Shearwaters (*Puffinus gravis*) fairly early; later in the day there

were quantities of them, in flocks of from six to thirty, sitting on the sea (it was quite calm) besides single birds flying about I saw several Sooty Shearwaters (*P. griseus*), and a few Manx Shearwaters (*P. anglorum*) with them.

On the 24th, about 10 a.m., we crossed the Bar outside the Gironde in returning. When we were only a few miles from the coast I began to see Great Shearwaters again, and saw them in some numbers all day. It was fairly rough, and they were mostly on the wing. I again saw a few of the other two species, and twice Storm-Petrels in the larger flocks, but the great bulk were Great Shearwaters. Next day (25th) we passed inside Ushant at 8.0 a.m. Soon afterwards I again saw Great Shearwaters, and I noticed a few every time I looked for them until evening, when we were less than two hours from Portland Bill. On this day there were rather more Manx Shearwaters than in the Bay, but no Sooty Shearwaters.

From this I think it may be that a northward movement had taken place during the month. H. G. ALEXANDER.

RARE BIRDS IN IRELAND.—Mr. W. J. Williams records in the *Irish Naturalist* (1912, p. 27) the following rarities :—

RICHARD'S PIPIT (*A. richardi*).—One was caught in a lark-net on October 23rd, 1911, near Howth, co. Dublin. This is the second Irish example, and curiously enough was caught by the same man who captured the first specimen.

AVOCET (*R. avocetta*).—One was shot near Broadway, co. Wexford, on November 1st, 1911.

RED-NECKED PHALAROPE (*P. hyperboreus*).—One was shot near Broadway, co. Wexford, on November 10th, 1911. There is only one previous winter occurrence recorded for Ireland.

GREAT SNIPE (*G. major*).—One was shot at Monivea, co. Galway, on October 5th, 1911.

SABINE'S GULL (*X. sabinii*).—An immature specimen was shot at Lough Derg on October 3rd, 1911.

BLACK-BELLIED DIPPER IN YORKSHIRE.—An example of this north European form of the Dipper (*Cinclus c. cinclus*) is recorded by Mr. F. Boyes (*Field*, 23.XII.1911, p. 1395) as having been shot near Bridlington, east Yorkshire. The bird was brought for Mr. Boyes's inspection on December 16th, 1911. Well authenticated examples of this form have been recorded a good many times from Yorkshire and Norfolk.

RICHARD'S PIPIT AT FAIR ISLE.—The Duchess of Bedford records (*Scot. Nat.*, 1912, p. 15) that two strange Pipits were

seen on Fair Isle on October 6th, 1911, and that one of them, on being shot by Her Grace, proved to be an immature example of *Anthus richardi*. The bird has been recorded several times previously from Fair Isle, but only twice from elsewhere in Scotland.

WOODCHAT SHRIKE IN SCOTLAND.—The occurrence of an immature example of the Woodchat Shrike (*Lanius pomeranus*), taken at the Light on the Isle of May in the early morning of October 19th, 1911, is announced (*Scot. Nat.*, 1912, p. 10) by the Misses Rintoul and Baxter. Although the bird has occurred as a vagrant in most English counties (most frequently in the south and east), there is no previous authentic record for Scotland.

SWALLOW AND MARTIN IN WINTER.—An example of *Hirundo rustica* in a starved condition was picked up dead at Reading on December 20th, 1911 (*Field*, 30.XII.1911, p. 1447), while a House-Martin (*Chelidon urbica*) was seen at Hampton Court on January 10th, 1912 (C. J. Robinson, *t.c.*, 13.I.1912, p. 92).

BIRDS BREEDING IN WINTER.—As in other mild winters, a good many instances of nests in December, 1911, have been reported, and these include several nests with young of Starlings and Song-Thrushes.

SERIN FINCH IN SCOTLAND.—Mr. O. H. Wild records (*Scot. Nat.*, 1912, p. 11) that an adult male *Serinus hortulanus* was captured on November 9th, 1911, near Edinburgh by some bird-catchers. The Serin has occurred over twenty times in England, chiefly in the south, and twice in Ireland, but not previously in Scotland.

MONTAGU'S HARRIER IN ROXBURGHSHIRE.—Mr. P. L. Waldron records (*Scot. Nat.*, 1912, p. 15) that an immature male *Circus cineraceus* was shot during the latter part of August at Newlands, Newcastle-on-Tyne, and has been presented to the Royal Scottish Museum. There are only six previous records of the occurrence of Montagu's Harrier in Scotland.

BAIRD'S SANDPIPER AT ST. KILDA.—Mr. W. Eagle Clarke records (*Scot. Nat.*, 1912, p. 9) that he obtained an adult female *Tringa bairdi* at St. Kilda on September 28th, 1911. This North American wader has only twice before been recorded for the British Isles (*cf.* Vol. I., p. 16), and this further proof that it occasionally visits us is very interesting.

BLACK GUILLEMOT IN YORKSHIRE.—Two examples of *Uria grylle*, which is a rare visitor to the Yorkshire coast, were shot at Filey during the second week of November, 1911 (E. W. Wade, *Nat.*, 1912, p. 21).



REVIEWS



Addenda and Corrigenda to the Birds of Dumfriesshire. By
Hugh S. Gladstone (Dumfriesshire and Galloway Nat.
Hist. Soc.).

THE substance of this pamphlet of thirty-six pages (conveniently printed in the same form as the author's book) was read as a Presidential Address to the local Natural History Society on October 20th, 1911. The most important of these *Addenda and Corrigenda*, which are detailed with the author's usual care and thoroughness, are referred to below.

In his book it will be remembered that Mr. Gladstone included the Marsh-Tit, but as no specimen from the county had been critically examined, this was a somewhat rash decision. On July 20th, 1911, a black-capped tit was obtained near Clonrae and submitted by Mr. Gladstone to the present writer, who proclaimed it to be an example of the Willow-Tit. This bird was in juvenile plumage, and there are a good many ornithologists who aver that in this stage the Marsh- and Willow-Tits are indistinguishable. The best character, viz. the glossy black "cap" of the Marsh- and the dull sooty-black "cap" of the Willow-Tit, is of no use in the juvenile plumage, where both species have dull brown "caps," and the graduation of the tail-feathers is an uncertain character. But I find that there is one character and that a good one, by which the two species can be separated: this is in the colouring of the outer webs of the secondaries, which in the Willow-Tit is buff and distinctly different from that of the inner webs, whereas in the Marsh-Tit both webs of the secondaries are of the same dark brown colour. I have referred at some length to this difference between the two species, because it is of importance, being a much more constant character than the shape of the tail, and the wing- and tail-feathers are the only ones of the juvenile plumage which are retained and not moulted when the bird attains first winter-plumage. In the "field" too, this character is useful, as the pale edging to the secondaries is distinctive even in the British Willow-Tit (*P. a. kleinschmidti*), while in the Northern Willow-Tit (*P. a. borealis*), it is very marked and at once catches the eye.

Mr. Gladstone now places the Red-backed Shrike within square brackets, which is wise; he states that the Great Spotted Woodpecker is increasing; that a Glossy Ibis was

shot from a party of four on July 26th, 1911, at Crurie; that the American Blue-winged Teal, shot at Upper Nithsdale in 1858 and now in the Royal Scottish Museum, is a female and not a male, as has been generally accepted; that a pair of Turtle-Doves were obtained in May, 1909, in the county, and a single bird in October, 1910, a Spotted Crake in August, 1910, a Ruff in September, 1911, while a pair of Green Sandpipers were seen in August, 1911. H.F.W.

Bird-Marking in the Netherlands. By Dr. E. D. van Oort.
(Note XII., of *Notes from the Leyden Museum*, Vol. XXXIV.)

THE Museum of Natural History at Leyden, we are glad to learn, has started this year (1911) a "marking scheme." The smaller rings are lettered ^{MUSEUM} ^{LEIDEN} and the larger ones ^{MUSEUM NAT. HIST.} ^{LEIDEN, HOLLAND} and all are of course numbered. More than 2,500 rings have been issued, and some 1,165 used on thirty-one species. The reported recoveries are at present naturally few in number.

Of 160 Wild Ducks (*Anas boschas*) "ringed," six were reported from August to October, all in Holland except one, which was found near Dunkerque, north France, on October 5th, having been "ringed" in Zeeland on July 28th.

Eighty-four Herring-Gulls (*Larus argentatus*) have been "ringed" and two recovered, one in south Holland and one which was "ringed" in north Holland on July 2nd, 1911, at Margate (Kent), on October 25th. Dr. van Oort remarks that, "the Herring-Gulls bred in the Netherlands seem to visit the coast of S.E. England"; but to this statement we very strongly object, as being founded on entirely insufficient evidence. Such remarks are most misleading.

Black-headed Gulls (*L. ridibundus*), as in our own lists, provide the greatest number marked, viz., 381, and of these seven, all marked in Zeeland, have been recovered—one in south Holland, one in Belgium, three in northern France, one in the south of France, and one in north-western Spain. Of these the most striking is the one reported from Palavas-les-Flots in the Gulf of Lion on August 9th, it having been "ringed" as a nestling in Zeeland on June 25th, 1911.

Reports of recovered birds bearing the Leyden ring should be sent to Dr. van Oort at the Museum, Leyden, with full particulars of the number, and date and place of recovery. We wish every success to our Dutch confrères in this undertaking.



LETTERS



DUNLIN OR DUNLING ?

To the Editors of BRITISH BIRDS.

SIRS,—The Editorial note appended to my letter in your last issue I am unable to regard either as satisfactory or logical. The very first sentence is open to objection, namely the statement that “ the proper scientific names to be used can be decided by following definite rules, the English names cannot.” Why not ? We have only to turn to such works as those of Dr. R. G. Latham, the Rev. Isaac Taylor, Professor Skeat and others, to find that there is no lack of rules. Then why not apply them ?

The Editors remark : “ The English name must, we think, be chosen (if there is a choice) on the authority of the majority of scientific writers.” The “ name ” yes, but not necessarily the spelling of it, if it can be shown to be erroneous—which is my point—as in the case of *Redpole* for Redpoll, *Cole-tit* for Coal-Tit, *Shielddrake* for Shelddrake, *Shoveller* for Shoveler, *Widgeon* for Wigeon, *Buffel-head* for Buffle-head, *Pomarine* for Pomatorhine and others. In the use of scientific names such corrections of orthography have been frequently proposed and adopted, as, for example, *spipoletta* for spinoletta, *hiaticola* for hiaticula, *podicipes* for podiceps, and so forth. Other emendations might be made, as for example *praticola* for pratincola, *phalaridopus* for phalaropus. And I see no reason why these emendations should not be made. The fact that some of our predecessors could not spell properly does not necessitate our adoption of their mistakes ; and the proper spelling of a word, as Professor Skeat and other philologists have shown, depends upon its derivation.

In regard to the name now in dispute, the only argument adduced by the Editors for retaining the form “ Dunlin ” is that it is used (as I had already admitted) in the majority of standard works ; though this would apply equally to “ cole-tit,” “ redpole ” and others, which have been changed with the approval of all educated naturalists.

The Editors ignore my reminder that “ Dunling ” is sanctioned by Professor Newton (*Ootheca* III., 225-26) with the concurrence of Professor Skeat, and are apparently unaware that it was adopted in print by the poet Gray, no mean authority, whose attainments as a naturalist were much greater than many people suppose.

But the argument is fallacious, for the Editors would apply the principle of “ *nomina auctorum plurimorum* ” in the case of English

names, but not in the case of Latin ones. Hence the inextricable confusion in which the scientific nomenclature of our British birds is now involved, through the change of names continually proposed by those who, without disrespect, may be termed "sticklers for priority." The Editors are good enough to suggest that I would do better "to agitate for priority in scientific names rather than for priority in the spelling of colloquial names for which no dates are fixed nor rules in existence." But it is no answer to a question on one subject to ask the writer to turn his attention to another; nor is it accurate to say that in the spelling of colloquial names no dates are fixed nor rules in existence. In the case of "Dunling" I fixed the date 1530-4, and one of the many valuable objects of the Oxford Dictionary, as everyone knows, is to indicate the earliest mention of English words with authoritative examples of their use. As to the existence of rules, I have already indicated where they may be looked for. But I have no desire to labour the point. I have merely thrown out a suggestion for an emendation in spelling which has commended itself to others besides myself, and for reasons which appear to me to be sufficiently convincing.

J. E. HARTING.

[Mr. Harting's letter is an excellent example of what he deprecates in others, and it seems to us that he fails entirely to carry out to their logical conclusion the principles he advocates. In Zoology we now have a date agreed upon by the representative naturalists of the world as our starting point in nomenclature, namely the publication of the tenth edition of the *Systema Naturæ* of Linnæus. By the general adoption of the first names given to each species from this time onward, uniformity of nomenclature can, and in time undoubtedly will, be attained. Yet we find Mr. Harting, with an inconsistency which is almost sublime, actually ascribing the chaos in nomenclature, which has been caused by the absence of a generally accepted rule, to "the sticklers for priority"—that is, those who obey it now that it is in existence! Still further, he speaks with approval of those who have made ornithology more confusing, by altering the spelling of generic and specific names arbitrarily, in accordance with their own ideas as to the derivation of the name, and threatens to make confusion worse confounded by suggesting fresh alterations of his own.

Let us say that we recognize that most of the alterations mentioned would be for the better, if Zoology were a subordinate branch of Philology. But it is nothing of the kind, and any trifling æsthetic gain would be outweighed a thousand times by the disadvantages of added confusion in practice. No one can read through a list of scientific names without seeing that many have been framed in defiance of all

the laws of language. Look at the innumerable barbaric compound names invented by ornithologists who were not classical scholars ; consider such names as *wumizusume*, *mlokosiewiczzi*, *caparoch*, etc. It is most deplorable that such names should be given, but when once applied they should be accepted.

As to popular names, it is true that Dr. Latham, Professor Skeat and others have thrown much light on the origin and history of modern English. But at present we have no Academy, as in France, to regulate the spelling of our language, and no laws on the subject exist. It is really decided simply and solely by general use. For the spelling of the name of the Dunlin, Mr. Harting tells us that he has fixed on the date 1530-4. But this date is a purely arbitrary one. It has not been agreed upon by the representatives of English-spelling peoples. Early modern English literature, it is true, may be said roughly to date from about 1500, but even in 1375 Barbour wrote in the "Ynglis toung" of "byrdis smale" such as the "nychtyngale" and "turturis." Does Mr. Harting seriously suggest that the spelling of *all* English words should be altered to that in vogue in 1530 ? Or are we to understand that this date applies to the Dunlin alone, and that he will fix dates for other species later on ?

When we open one of Mr. Harting's books we find, in accordance with common usage, the Wheatears and Titmice mentioned. Yet the author is perfectly aware that the name Wheatear has nothing to do with "wheat" or "ear" ; the "mouse" of Titmouse has nothing to do with the rodent of that name. Perhaps we may be allowed to suggest another change to Mr. Harting, if he proposes to continue his work of reform. There is little doubt that our word Grouse was originally introduced into our language from the old French word "Griesche," as a collective or plural noun "Grice." It is thus written by Cotgrave in his *Dictionarie of the French and English Tongues* (1611). By a false analogy the word Grouse (variously written Grows, Grous, and Grouss) seems to have sprung up. Mr. Harting points out that the most correct spelling is that which shows the derivation most clearly, so that he should adopt Cotgrave's spelling in accordance with the "rules" of Professor Skeat and other authorities on Philology. Why has not our critic the courage of his convictions, and why does he not spell these names in accordance with their etymology ?

As to Professor Newton's adoption of the spelling "Dunling," we think this was sufficiently answered in our last number, where we pointed out that Professor Newton also adopted the spelling "Cuckow," which had not found acceptance even by Mr. Harting.—EDS.]



PORTRAIT OF THOMAS MUFFETT, ENLARGED FROM THE TITLE-PAGE OF
THE "THEATRUM INSECTORUM."

BRITISH BIRDS

EDITED BY H. F. WITHERBY, F.Z.S., M.B.O.U.

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THOMAS MUFFETT.*

BY

W. H. MULLENS, M.A., LL.M., F.L.S.

[PLATE 4.]

MOST of the early text-books on British ornithology are comparatively well known, and the more important of them have either been reprinted or so extensively quoted in modern works that the information they contain is easily accessible to the student and inquirer. There exist however some considerable and important accounts of the avifauna of this country in bygone times, hidden away in various books, which, from their titles, would seem to have little or no connexion with that subject, and which from their rarity are almost unknown to the general reader. Such a one is *Healths Improvement*, the work of a famous old physician named Thomas Muffett; its full title and collation being as follows:—

Healths Improvement:/ or,/ Rules/ Comprising and Discovering/ The Nature, Method, and Manner of/ Preparing all sorts of/ Food/ Used in this Nation. /Written by that ever Famous/ Thomas Muffett, /Doctor in Physick:/ Corrected and Enlarged/ by/ Christopher Bennet,/ Doctor in Physick, and Fellow of the/ Colledg of Physitians in London./ London,/ Printed by Tho: Newcomb for Samuel Thomson, at the/ sign of the white Horse in Pauls Churchyard, 1655.

1 vol. 4to., Collation: pp. 8, + pp. 2 un, + pp. 296.

Thomas Muffett died in 1604, and the above work, as will be observed from the title, was not published till some years afterwards, when it was edited with corrections and additions by another eminent physician, Christopher Bennet (1617-55). The original work is generally ascribed to the year 1595, and how much Bennet added to it is uncertain, but in all probability that portion of the book

* This article first appeared as one of the "Occasional Publications" of the Hastings and St. Leonards Natural History Society, and it is here reprinted with the illustrations by kind permission of the author and the society.—EDS.

Healths Improvement:

J. C. O R, 1756

RULES

Comprising and Discovering

The *Nature, Method, and Manner* of
Preparing all sorts of

FOOD

Used in this NATION.

Written by that ever Famous

THOMAS MUFFETT,

Doctor in PHYSICK: *M S*

Corrected and Enlarged

BY

CHRISTOPHER BENNET,

Doctor in Physick, and Fellow of the

Colledg of Physitians in *London.*

LONDON,

Printed by *Tho. Newcomb* for *Samuel Thomson*, at the
sign of the white Horse in *Pauls Churchyard*, 1655.

which contains the descriptions and observations of wild birds, was Muffett's work entirely. Muffett we know for certain was an able and enthusiastic naturalist, his *Insectorum sive minimum Animalium Theatrum*, which was printed in 1634, was for long the leading work in that branch of zoology, while Bennet, though also known as an author,* confined his labours to matters strictly medical.

The fact that Muffett mentions more than one hundred different kinds of British birds, and that he wrote at a time when the printed matter relating to the ornithology of this country was meagre in the extreme, makes his book, quaint and instructive as it otherwise is, of very considerable importance to the student of early British ornithology. Most of our information on this subject previous to the date of Muffett's work is derived from the following authors: William Turner (1500-68), John Caius (1510-73), and William Harrison (1534-93). Of these Turner, whom Muffett quotes as "old Dr. Turner," is by far the most important. In his *Avium Præcipuarum . . . historia*,† published in 1544, is contained our principal account of the bird-life of England in the sixteenth century. Caius, in his *Britanni de rariorum animalium* (1570), described only seven British birds, while Harrison's well-known *Description of England* prefixed to Holinshed's *Chronicle*, and published in 1586, contains little more than a list of names of the various birds he assigns to that country.

It was not till 1666 that the first printed list of British birds appeared. This was contained in Christopher Merrett's (1614-95) *Pinax Rerum*, published in 1666,‡ while the first genuine ornithology published in this country, that of Francis Willughby (1635-75), did not appear till 1676.§

* Bennet published a treatise on Phthisis in 1634, under the name of *Benedictus*.

† Translated and published with notes by A. H. Evans, Cambridge, 1903; cf. Vol. II., pp. 5-13.

‡ cf. Vol. II., pp. 109-18 and 151-63.

§ cf. Vol. II., p. 297.

Of the thirty-two chapters which comprise the contents of *Healths Improvement*, two only are devoted to wild birds. These are numbers XI. and XII., and are respectively entitled "Of the flesh of wild Fowl, abiding and feeding chiefly upon the Land," and "Of the flesh of wild Fowl, abiding and feeding chiefly upon the waters."

Owing to the rarity of Muffett's work, we here reproduce verbatim his observations as contained in these two chapters, omitting only those portions which are of a medical or purely discursive nature. It may be mentioned in passing, that the account of the wild birds is preceded by a chapter (No. X.), which treats "Of the flesh of tame Birds," from which it is interesting to learn that "white chickens" were deemed to be hardest of digestion, and that certain localities were already famous for their breeds of domestic poultry, those of "the Kentish kind" being preferred for "bigness and sweetness." Of Peacocks as an article of diet, Muffett had but a poor opinion, informing us that "their flesh is very hard, tough and melancholick, requiring a strong stomach and much wine, and afterwards great exercise to overcome it," and we further learn that the flavour of geese was vastly improved by making these animals inhale the "smoke of Borax down into their bodies" three or four times before they were killed.

Turning to the chapters on the flesh of wild-fowl, Muffett's remarks are as follows :—

CHAPTER XI.

. . . now let us descend to their particulars, beginning with birds of greater volume.

TARDÆ.

Bistards or Bustards (so called for their slow pace and heavy flying) or as the Scots term them, Gusestards, that is to say, Slow Geese, feed upon flesh, Livers, and young Lambs* out of

* Evidently a confusion between Bustard and Buzzard; cf. Yarrell, *British Birds*, 4th ed., Vol. III., p. 195; *vide*, however, Smith's *Birds of Wiltshire*, p. 353, where the principal food of a Great Bustard kept in captivity is described as "birds, chiefly sparrows . . . also mice."

sowing-time, and in harvest-time, then they feed upon pure corn. In the Summer towards the ripening of corn, I have seen half a dozen of them lie in a wheatfield fattening themselves (as a Deer will doe)* with ease and eating, whereupon they grow sometimes to such a bigness, that one of them weigheth almost fourteen pounds. . .

GRUES.

Cranes breed (as old Dr. Turner writ unto Gesner)† not only in the Northern Countrys amongst the Nations of Dwarfs [this refers of course to the old fable of the enmity of the Cranes and Pygmies], but also in our English Fens . . . with us they feed chiefly upon corn, and fenny seeds, or bents, . . . Certain it is that they are of themselves hard, tough, . . . unfit for sound men's tables. . . yet being young, killed with a goshawk, and hanged two or three daies by the heels, eaten with hot galantine, and drowned in Sack, it is permitted unto indifferent stomachs. [Truly, one cannot help pitying those indifferent stomachs.]

CICONIÆ, ASTERIÆ, ARDEOLÆ.

Storks, Bittors [*i.e.* Bitterns] and Herons neither do breed, nor can breed any good nourishment, . . .

Nay even all the Heronshaws, (namely the black, white, criel-Heronshaw, and the mire-dromble), though feeding somewhat better than the Byttor or Stork are but of a fishy and strong savour. . . .

PHASIANA.

Phesants . . . are best in winter: . . . no meat so wholesom as Phesant-pouts; but to strong stomachs it is inconvenientest, especially to Ploughmen and labourers, who eating of Phesants, fall suddenly into sickness and shortness of breath. . . . [A kindly warning to the poachers of his day.]

ATTAGENES MYRICÆ.

Heath-cocks . . . all their flesh proves black, saving the brawn next their breast-bone, which is ever white, tender, firm and wholesome.

* It is a curious coincidence that Gilbert White should have remarked, "Bustards when seen on the downs resemble Fallow Deer at a distance." —Jesse, *Gleanings in Natural History*, second series, Vol. II., p. 180.

† Conrad Gesner (1516-61), author of *Historiæ Animalium Liber III. qui est de Avium Natura*, 1555. For Turner's remarks on the breeding of Cranes in England, *vide* Evans's translation, p. 97. See also Vol. II., p. 10.

PERDICES.

Partridges . . . are thought by Sethe* to have an extraordinary weakness in them, causing them to go as if their back or ridg-bone were parted in sunder, whereupon perhaps they had their name, and were called Part-ridges.

RALLÆ TERRESTRES.

Railes of the land (for there is also a water-rail . . .) . . . are not without cause preferred to Noble mens Tables.

GALLINAGINES AND RUSTICULÆ.

Woodcocks and Snites† . . . especially at their first coming in, or rather . . . when they have rested themselves after their long flight from beyond the Seas are fat, . . . Avicent‡ and Albertus§ dreamed that Woodcocks and Snites, fed upon seeds; whereas indeed no bird with a long piked, crooked, and narrow bill can pick them up; but where they perceive a worms hole (as I have seen Snites to do) there they thrust in their bill as far as they can, and if the worm lie deep, they blow in such a breath or blast of wind, that the worms come out for fear as in an Earthquake . . . There is a kind of Wood-Snite in Devonshire greater than the common snite.

	{	PETRICOLÆ
COLUMBÆ		LIVLE
		PALUMBES
		TURTURES

Wild-Doves be specially four in number, Rock-Doves, Stock-Doves, Ring-Doves and Turtle-Doves. Rock-Doves breed upon Rocks by the Sea-side, but never far from Corny Downs, whether in Seed and Harvest-time they fly for meat, living all the year besides upon Mast and Ivy-berries.

CORTUNICES.

Quails . . .

PLUVIALES.

Plovers . . . and the gray Plover is so highly esteemed, that this Proverb is raised of a curious and malecontented stomach; *a gray Plover cannot please him*. Yet to some the green Plover . . . [*i.e.* the golden plover] seemeth more nourishing and to others the Lapwing . . .

* Simon Sethus, author of *de Alimentis*, 1561.

† *i.e.* Snipes.

‡ Avicenna (980-1037) the famous Arabian physician and author.

§ Albertus Magnus (1193-1280).

CUCULI.

Cuckoes . . . and albeit the old ones feed filthily upon Dorrs, Beetels, and venomous spiders, yet the young ones are fed by the Titling (their foster-dam) with gnats, flies, and red-worms, . . .

FEDOÆ.

Godwits are known to be a fenny fowl, living with worms about Rivers banks, and nothing sweet or wholsom, till they have been fatted at home with pure corn ; but a fat Godwit is so fine and light a meat, that Noble-men (yea and Merchants too by your leave) stick not to buy them at four nobles a dozen. Lincolnshire affordeth great plenty of them, elsewhere they are rare in England wheresoever I have travelled.

ERYTHROPODES AND GLOTTIDES.

Redshannks also and Gluts feed in the Fens . . .

OCHROPODES.

Smirings live in watrish copses . . .

PICI.

Pyes or Haggisses feed upon flesh, eggs, worms and ants . . .

GRACULI.

Jayes feed upon akorns, beech-mast and worms, . . .

PICI MARTII.

Wood-Peckers . . . feed upon timber-worms . . .

ORIOLI.

Witwols are of excellent good nourishment, . . feeding upon bees, flies, snails, cherries, plums, and all manner of good fruit.

ARQUATULÆ TERRESTRES.

Stonechatters feed as they doo. . . [*i.e.* as Witwols.]

ISPIDA.

The Kings-fisher feedeth most upon water-worms and little fishes . . .

COCCOTHRAUSTES.

The Clot-bird (called sometimes a Smatch, or an Arling) is as big almost as a Thrush, feeding chiefly upon cherries, and cherry-kernels. [There is some confusion here, clot-bird, smatch and arling being synonyms for the Wheatear, while Muffett is clearly referring to the Hawfinch.]

NUCIFRAGA.

The Nope feedeth upon mast, nuts and cherries. [This may refer to the Nutcracker. Nope was also a name of the Bullfinch; cf. Swainson, *Provincial Names of British Birds*, p. 66.]

SITTA.

So also doth the little Pyot, which we call a Nutjobber [*i.e.* the Nuthatch].

UPUPÆ.

Houpes [*i.e.* Hoopoes] were not thought by Dr. Turner [*i.e.* Turner, cf. Evans' edition, p. 175] to be found in England, yet I saw Mr. Serjeant Goodrons kill of them in Charingdon Park, when he did very skilfully and happily cure my Lord of Pembroke at Ivychurch; . . .

TURDI AND TURDELÆ ANGLICANÆ.

Thrushes and Navisses feed most upon hawes, sloes, misle-berries and privot-berries . . .

TURDI EXOTICI.

Feldefares are of the like feed . . .

MERULÆ.

Blackbirds . . . Their feed is on little grasshoppers, worms . . .

STURNI.

Stares-flesh . . . [*i.e.* Starlings] is dry and sanery [*i.e.* sound.]

NOCTUÆ.

Concerning Owles . . . they feed upon mice, frogs, grasshoppers and all kinds of flesh.

CORVI LEGUMINALES.

Rooks . . . feed chiefly upon pure corn . . .

CORVUS.

The carrion crow is generally condemned, and worthily despised of all men: as also the Cadesse or Jackdaw. . . Now we are come to treat of small Birds of the land, which we will divide according to the order of the Alphabet . . .

MONTIFRINGILLÆ.

Bramblings are a kind of small Birds, feeding chiefly upon seed, sloes, and hawthorne kernels.

RUBETRÆ.

Buntings feed chiefly upon little worms.

PYRRHACIA.

Bullfinches feed not only on little worms, but also upon hemp-seed, and the blossoms of peare-plums and apple trees.

CITRINELLÆ.

Citrinels or straw-coloured Finges, [*i.e.* Finches] be very small Birds, feeding chiefly of white and black poppy seed but especially of the wild-poppy called Red-weed.

CERTHÆ.

Creepers seem to be a kind of Titmice, living upon the worms which engender in and betwixt the barks of trees.

FRINGILLÆ.

Finches for the most part live upon seeds, especially the Goldfinch, which refuseth to eat of anything else.

ACANTHIS ATLANTICA.

So also doth the Canarie Finch or Siskin ; yet the Bullfinch in hunger feeds upon small worms ; and the Greenfinch upon horsedung, and nuts in frosty weather.

ALAUDÆ.

Larks are of three sorts : Field Larks, Wood Larks, and Heath Larks . . . Some of each sort are high crested like a Lapwing, others uncrested . . .

LINARIÆ.

Linnets feed chiefly upon flax seed ; but for a need they eat also the seed of hemp and thistles.

APODES.

Martinets are either smooth or hairy legg'd : for neither of them have perfect feet, but stumps instead of feet. [The heraldic martin is always blazoned without legs, *cf.* Phipson, *Animal Lore of Shakespeare's Time*, p. 192.]

LUSCINIÆ.

Nightingales as Martial said are nothing worth when their breath is departed . . . They feed filthily in the fields upon spiders and ants . . .

PARI MAJORES.

Oxeys or great Titmice, feed (as ordinary Titmice do) upon caterpillars, blossoms of Trees, bark worms and flies, . . .

RUBECULÆ.

Robin-red-breasts feed upon bees, flies, gnats, walnuts, nuts and crumbs of bread. . . .

PASSERES.

Sparrows of the house, feed commonly on the best corn. . . but the red [reed ?] and hedg Sparrows feed ill—. . .

HIRUNDINES.

Swallows (be they either house Swallows or banck* Swallows.) . . .

CURRUCA.

The Titling, Cucknell, or unfortunate Nurse (for the Cuckoe ever lays his eggs in the Titlings nest) feeds upon gnats, flies and worms, it is a very hot bird, coming in and going out with the nightingale. . . .

PARI.

Titmise are of divers shapes with us in England ; some be long, others be very short tailed ; some have black heads, some blew, some green, some plain and some copped . . .

[Copped=crested. This reference to the Crested-tit is a remarkable one if Muffett really had observed it in England. The first British record is generally ascribed to John Walcott (*ob.* 1831), who in his *Synopsis of British Birds*, 1789, figures the Crested-tit and states that this bird had been lately observed in Scotland.]

MOTACILLÆ.

Wagtailes live upon flies, worms, and fat earth . . .

REGULI.

Wrens feed finely and sometimee fill themselves so full of little flies, that their bellies are like to burst.

GALGULI.

Yellow Hammers feed (as the most part of Titmise) of seeds and grain . . .

CHAPTER XII.

CYGNI SYLVESTRES.

Of all water fowl the wild Swan is the biggest and fairest in outward shew . . .

ANSERES SYLVESTRES.

Wild Geese . . . their high and long flight breedeth tenderness of body . . . but of all others the Bergander [probably the Sheldrake] is the best and lightest.

ANATES FERÆ.

Wild Ducks feed chiefly upon a green narrow leaved grass (called therefore Ducks grass by Crescentius† . . .

* *i.e.* Sand-martins.

† Pietro Crescenzi, *nat.* 1230, author of *Ruralium Commodorum* ?

ANATES MUSCARIÆ.

But there is a kind of wild Duck called *Anas muscaria* because it eats nothing but flies. . . .

BRANTÆ.

Barnicles both breed unnaturally by corruption . . .
[this of course refers to the well-known fable of the generation of Barnacle geese from rotten timber.]

QUERQUEDULÆ.

Teales and Widgins much esteemed above wild Ducks or Geese.

TOTANI.

Pool-Snites* live only upon fish . . .

MERGANSERES.

Shell-drakes, or the Ducks of Italy, are of most pleasant taste . . . sometimes they wax so fat, that their feathers being pul'd off, their body hath weighed twelve pound weight.

URINATRICAS.

Divers feed most upon reeds and reed roots and caddis-worms breeding in them.

SCARBOIDES.

Such likewise is the Dobchicks food ; . . .

FULICÆ.

Coots feed upon reeds, mud, grass, little snails, and small fishes . . .

NIGRITÆ.

Moor-cocks and moor-hens, as also Pocards, be of like nature with coots . . .

PICI MARINI.

Sea-pies [*i.e.* Oyster-catchers], as Dr. Cajus† writeth, resemble other Pies in Colour, but they have whole feet like water fowl‡ ; they feed upon spawn, frogs, and frie of fish . . .

MERGI.

Comorants, be they gray or black, feed most of fish and frogs, but especially of Eels . . .

* Possibly the Redshank.

† John Caius, 1510-73.

‡ Here Muffett is mistaken.

ARQUATÆ.

Curles [*i.e.* curlews] feed wholesomely upon cockles, crenisses [*i.e.* crawfish] muscles, and perwinkles, which maketh them to have no ill taste . . .

[Muffett does not praise the flesh of the Curlew as highly as might be expected. Gesner terms it “*lautissima*” * and the old Lincolnshire saying runs :

“A curlew lean or a curlew fat
Carries twelvecence upon her back.”]†

GULONES ALBI & CINEREI.

White gulls, Gray gulls, and Black gulls (commonly termed by the name of Plungers and Watar-Crows) . . .

PUFINA BRITANNICA.

Puffins being Birds and no Birds, that is to say Birds in shew and fish in substance, or (as one may justly call them) feathered fishes, are of ill taste and worse digestion ; how dainty soever they seem to strange appetites, and are permitted by Popes to be eaten in Lent.

ERYTHROPODES.

Redlings or Water-Redshancks feed as Water-railes do, and be of the like nourishment.

RALLÆ AQUATICÆ.

Water-railes are preferred in Italy before Thrushes or Quails ; they feed upon water-snails and water-flies, and the worms breeding in the roots of reeds . . .

LARI.

Sea-mews or Sea-cobs feed upon garbage and fish . . .

PLATÆ.

Shovelars [*i.e.* Spoonbills] feed most commonly upon the Sea coast upon cockles and shell-fish ; being taken home and dieted with new garbage and good meat, they are nothing inferior to fatted gulls.

* Most delicate or rich.

† Another version of this couplet runs :

“A Curlew be she white or black
Carries twelvecence on her back.”

“Black Curlew” is mentioned by Lubbock, *Fauna of Norfolk*, p. 83, Norwich, 1879, as the ordinary name of the Glossy Ibis at the beginning of the last century.—F.C.R.J.

The above-quoted comments of Muffett show that he was an accomplished ornithologist, and far in advance of his age ; it must moreover be remembered that he was not writing a treatise on natural history but what has been termed " a gossipy collection of maxims concerning diet," and he no doubt could have given us far more information concerning the habits of the birds he mentions had he been minded to do so. Most of his observations were evidently made at first hand, and he seems to have travelled somewhat extensively in England, as witness his remarks on the Godwit. His account of the Great Bustard has often been quoted ; it was no doubt in Wiltshire, where he passed the latter portion of his life, that he had watched them feeding, and that county was one of the last strongholds of this remarkable bird, now for many years extinct in the British Isles. His mention of the Crane as breeding in the fens is confirmed by Turner* and by the accounts of the City Chamberlain of Norwich (*Natural History of Norfolk* ; Sir Thomas Browne ; p. 6),† amongst them on the 6th June, 1543, appearing a charge for " a young pyper crane " from Hickling. In Willughby's time, however, the Crane, though still abundant, had probably ceased to breed in this country, as he writes : " They come often to us in England ; and in the Fen-countries in Lincolnshire and Cambridgeshire there are great flocks of them, but whether or no they breed in England I cannot certainly determine either of my own knowledge or from the relation of any credible person." (*The Ornithology of Francis Willughby*, p. 274.)

Muffett's ideas on migration were also apparently correct, as he speaks of the condition of Woodcock and Snipe " after their long flight from beyond the seas," and this is the more remarkable as but the haziest notions were entertained on this subject in his time, and as late as 1703 we find the anonymous author of a tract entitled

* cf. Evans's edition, p. 97.

† Published with notes by Thomas Southwell, London, 1902.

An Essay Towards the probable Solution of this Question—whence come the Stork and the Turtle, the Crane and the Swallow, . . . or where those Birds do probably make their recess and Abode, which are absent from our climate at some certain Times and Seasons of the Year (1 vol. 12mo., London, 1703), suggesting as his “probable solution” that migratory birds on leaving this country retreated to the moon!

Muffett’s description of the “Wild Doves” is also well worthy of notice; not only does he correctly distinguish the four kinds, but he gives an excellent account of the Rock Dove, a bird unknown to Willughby, who merely mentions it on the authority of his correspondent, Mr. Ralph Johnson, of Greta Bridge in Yorkshire (*The Ornithology*, p. 186).

The Hoopoe, moreover, seems to be first mentioned as a British bird in *Healths Improvement*. Turner wrote, “nowhere in the whole of Britain is the Upupa to be found (so far as I know),” and although the credit of including this handsome bird in the British list is generally attributed to Christopher Merrett (*Pinax Rerum*, 1666), it of right belongs to Thomas Muffett.

It must be admitted on the other hand that the information afforded in *Healths Improvement* concerning the water-birds is very meagre, a circumstance which no doubt arose from Muffett’s observations being principally made in the inland county of Wilts.

Our author, whose name has been indifferently spelt Moffett, Moufet, Muffet, or Muffett, was born in 1553, in the parish of St. Leonard’s, Shoreditch. He appears to have been of Scottish descent, and was the second son of Thomas Muffett, citizen and haberdasher of London, his mother being Alice Ashley of Kent. Muffett was educated at Merchant Taylors’ School, and became a pensioner of Trinity College, Cambridge, in May, 1567, migrating three years later to Caius College, where he took his degree of B.A. At Cambridge Muffett studied medicine under the illustrious John Caius, himself a

naturalist of renown. During his undergraduate days Muffett nearly succumbed to an attack of ptomaine poisoning caused by eating mussels (*Healths Improvement*, p. 159). He seems to have been somewhat inconstant in his attachment to his colleges, for deserting Caius and choosing to proceed to his M.A. degree from Trinity, he was promptly expelled from the former college by Thomas Legge, the Master. Muffett has been included by A. Wood in his *Athenæ Oxonienses*, but there seems to be no authority for the statement that he studied at that University. On leaving Cambridge, Muffett went abroad, and studied medicine at Basle, taking the degree of M.D. there in 1578. He also visited Italy and Spain, in which latter country he paid much attention to the cultivation of the silkworm, and afterwards published an anonymous poem on that subject. In 1582 he returned to Cambridge, and in July of that same year accompanied Peregrine Bertie, Lord Willoughby, to Denmark, on the occasion of the investiture of King Frederick with the Order of the Garter, and he records that the royal banquets in that kingdom lasted seven and eight hours at a stretch. By 1588 Muffett was established in a good practice in London (he appears for a time to have resided at Ipswich), and in February, 1588 he was elected a Fellow of the College of Physicians. In July, 1586, he attended in conjunction with Thomas Penny, his friend and colleague, the death-bed of Anne Seymour, Duchess of Somerset, widow of the Protector, and attested her will, and in 1591 he was appointed physician to the forces serving in Normandy under the Earl of Essex. On his return to England, Muffett spent much of his time at Court, where he made the acquaintance of Sir Francis Drake, who first showed him a flying-fish. Muffett at this time came under the notice of Henry Herbert, second Earl of Pembroke, and his Countess, who became his patrons, and at or near whose residence at Wilton he appears to have settled down as a pensioner. By the Earl's influence he was returned as a Member for Wilton in 1597. Aubrey

(*Natural History of Wiltshire*, p. 89) includes Muffett in his list of "Learned men that had pensions granted to them by the Earles of Pembroke," and speaks of him as "The learned Dr. Mouffett, that wrote of Insects and of Meats."

Muffett died at Wilton on June 5th, 1604, and was buried in the church of that parish. In addition to *Healths Improvement*, another work of Muffett's was published posthumously. This was his well-known book on the history of insects, which he compiled from the writings of Edward Wootton (1492-1555), Conrad Gesner, and the papers of his friend Thomas Penny (*ob.* 1589). This work was first published in Latin in 1634 under the title of *Insectorum . . . Theatrum*, and being afterwards translated into English was appended to the later edition of Edward Topsell's (*ob.* 1636) *Historie of Foure-footed Beastes and Serpents*.

His work, *Healths Improvement*, to which Muffett had intended to add a companion volume on Drinks, was republished in 1746, with a life of the author by William Oldys. Muffett was twice married, first to Jane, daughter of Richard Wheeler of Worcestershire, and after her death in 1600 to a widow named Catherine Brown, who survived him.

The portrait of Muffett here reproduced is from the frontispiece of *Theatrum Insectorum*, Sloane MS. 4014, in the British Museum; C. Gesner, E. Wootton, and T. Penny being figured on the same plate.

An enlargement of Muffett's portrait and a facsimile of the title-page of *Healths Improvement* are also reproduced.



NOTES



A COLONY OF HOUSE-MARTINS BUILDING ONE NEST.

WITH reference to Mr. O. G. Pike's note on this subject (*supra*, p. 225), it may be mentioned that Charles Darwin noticed just the same thing. Writing to the Rev. L. Jenyns, in October, 1846, *re* his *Observations in Natural History*, he says: "I was interested in your account of the Martins, for I had just before then been utterly perplexed by noticing just such a proceeding as you describe; I counted seven one day lately visit a single nest, and sticking dirt on the adjoining wall."

G. B. HONY.

SHAGS INLAND IN CHESHIRE AND YORKSHIRE.

ON or about January 24th, 1911, six Shags (*Phalacrocorax graculus*) were seen sitting together on an araucaria in the park at Ashton-Hayes, some seven miles east of Chester. Two of the birds were shot, and one of these, which was immature, was sent to the Grosvenor Museum, Chester. On the same day one alighted on the tower of Nantwich Church; it was captured, released, and subsequently shot on the river Weaver. It has been secured for the museum at Willaston School. On the 26th an example which had been killed at Waverton, near Chester, was sent to the Grosvenor Museum. Possibly these two birds were amongst the six seen at Ashton-Hayes. One reached Rostherne Mere, near Bowdon. The body of this bird was discovered on the margin of the mere by a gamekeeper on February 10th. It had then only been dead a day or two. I saw the bird, which was immature, on the 17th. The incursion does not appear to have been purely local, for on the 26th Mr. W. Greaves tells me that he identified a Shag (supposed to have been a Cormorant) which had been killed on a pond at Hebden Bridge, Yorkshire.

The identification of the five birds obtained is satisfactory.

T. A. COWARD.

BARNACLE-GOOSE INLAND IN CHESHIRE.

ON January 18th, 1912, the day following the blizzard, I saw a Barnacle-Goose (*Bernicla leucopsis*) on Radnor Mere, Alderley, Cheshire. The behaviour of the bird did not suggest an "escape." It was very suspicious and restless,

and several times rose easily, and with rapid, graceful flight circled over the water, uttering short, sharp, yelping calls. The wild weather kept it on Radnor till the morning of the 19th, when, though there was the length of the mere between us, and I kept as much out of sight as possible, the bird rose and flew away less than a minute after my appearance, and did not again return. The Barnacle-Goose has not hitherto been observed inland in Cheshire, and the presence of a wild bird on a water twenty miles distant from the nearest coast, can only be ascribed to the very severe climatic conditions obtaining at the time of its first appearance on the mere in question.

M. V. WENNER.

GADWALL IN PERTHSHIRE.

WITH reference to Mr. Heatley Noble's record of a Gadwall in Perthshire, which he says is the first record he possesses of the species within the district (*supra*, p. 247), I may state that I have known the Gadwall (*Anas strepera*) as a regular autumn and winter visitor to Perthshire for the past fifteen years. Gadwall visit the Earn at Duncrub nearly every autumn and winter (see *Nat. Hist. of British Surface-feeding Ducks*, p. 30), and I have seen them on the Isla at Stobhall. They now breed every year at Loch Leven, which is probably the place of nesting, within thirty miles, to which Mr. Noble refers.

J. G. MILLAIS.

FERRUGINOUS DUCK IN SOUTH DEVON.

ON January 27th, 1912, a duck was noticed at high-water, swimming off Tacket Wood, on the Kingsbridge Estuary, close to the town. A neighbouring sportsman took his gun and shot the bird from the quay-side and gave it to a bargee, who retrieved it in his boat, for his Sunday dinner. Fortunately I heard of a strange "Wigeon" being killed, and following up the clue given, was able to save the bird from an ignominious fate. It proved to be a female Ferruginous Duck (*Fuligula nyroca*) with typical pale primrose irides. This is the second uncommon visitor of late years I have saved from the cooking-pot on a Sunday morning, the one before being a Pink-footed Goose.

E. A. S. ELLIOT.

A FLOCK OF ADULT GOLDEN-EYE DRAKES IN SPRING.

THE adult Golden-eye Drake (*Clangula glaucion*) is most usually seen singly in this country, but I have several times noticed small packs of from ten to twenty adult drakes and ducks or young drakes on Lochs Stenness and Harray during

February. On March 18th, 1907, however, I was greatly surprised, when at the top of Deepdale on Loch Stenness, to put up a large pack of over two hundred Golden-eye, of which every bird, so far as I could see, was an adult drake. They were naturally extremely wild, and presented a magnificent sight as they wheeled and came down wind.

H. W. ROBINSON.

DRAKE SMEW IN CHESHIRE.

ON January 27th, 1912, Mr. T. Hadfield, Mr. T. Baddeley and I watched an adult drake Smew (*Mergus albellus*) at close-quarters on Marbury Mere, near Northwich. When we first noticed the bird it was flying with two brown-headed Goosanders, but it soon left them and swam by itself, diving repeatedly. The Goosanders had been on the water for at least a week, but the Smew was not with them when I visited the mere on the 23rd. The bird looked very white; the black on the wings and back was almost concealed when it was swimming, but conspicuous when on the wing or when it raised itself in the water, as it frequently did, to flap its wings. We were struck by the two crescentic black bands over the shoulders and in front of the wings; they showed as two narrow, regular, curved lines.

The bird was on the water on the 28th, but on the 29th the mere was frozen over and it was not visible.

It returned during the thaw; I saw it on February 10th, and it was still there on the 18th.

Brown-headed Smews occur occasionally inland in Cheshire, but old drakes are seldom seen. Mr. C. Oldham saw a brown-headed bird on Radnor Mere, Alderley, on December 24th, 1911.

T. A. COWARD.

LITTLE BUSTARDS IN NORFOLK AND SCOTLAND.

ON January 4th, 1912, a Little Bustard (*Otis tetrax*) was shot on a wet marsh at Strumshaw, near Norwich, by Mr. A. Mason. This species is always a rare bird, but when it does occur in the eastern counties, as often as not it is in mid-winter. Probably it is from Russia that most of our examples come, for in mid-winter we hardly look for migrants from countries south of us, such as Algeria and Spain, to visit England.

Another was shot in Kincardineshire on January 1st, after frequenting a certain field for a fortnight (*Scottish Naturalist*, 1912, p. 44).

J. H. GURNEY.

BLUE EGGS AMONG THE WADERS.

THOUGH lack of pigmentation in the shell no doubt generally bespeaks a morbid condition in the reproductive system,

yet there would appear to be certain cases of abnormal coloration for which another cause must be sought. May not reversion to an ancestral type of shell be a factor in these cases? That they occur among the Limicolæ as well as in the Gaviæ, see BRITISH BIRDS, Vol. II., pp. 134-5; and in April, 1911, I found the almost perfect shell of a Lapwing's egg (a Carrion-Crow had pierced and sucked it), the ground-colour of which was pale blue, uniformly but not very thickly covered with small black spots. Within a short distance was a smaller fragment of another shell of exactly similar type.

M. WINZAR COMPTON.

[It is a well-known fact that blue eggs, sometimes entirely devoid of markings and sometimes slightly or normally marked, occur not only among the Waders and the gulls and terns, but also among the game-birds. But it is not necessary to explain this as caused by reversion to an ancestral type. As a matter of fact, the ancestral type must have been white, as it is invariably among reptiles at the present time. It is evident that the ground-colour of an egg must be imposed at an earlier period of development than the surface-markings, while the shell is still soft and receptive of colour. The surface-markings are caused by the secretion of pigment from glands when the surface of the egg has become hardened. If the egg is extruded prematurely, these latter markings are often wanting, but the same effect may be produced if the secretion of pigment is interfered with in any way. Most blue eggs of Lapwings belong to the former class, and have imperfectly developed shells. Probably in a normal Lapwing's egg the blue ground is obscured by the subsequent secretion of brownish pigment while the shell is still soft, thus forming the olive ground on which the blackish surface-markings are superimposed. If through exhaustion or any other cause the secretions which form the surface-markings fail, the egg may be retained in the oviduct till fully developed, but when laid, the egg will be found to lack the black (surface) spots. In a prematurely-laid egg the fine black specks show where the surface secretions are just beginning to be deposited.—F. C. R. JOURDAIN.]

THE 1912 "WRECK" OF THE LITTLE AUK.

UNDOUBTEDLY great numbers of Little Auks (*Mergulus alle*) came to grief on our shores and were driven far inland during the severe weather at the end of January and beginning of February, 1912. Judging by the information which has so far come to hand, it would appear that the bird has suffered no disaster comparable to this since January and February, 1895.

We hear of great numbers on the east coast of Scotland, and of some in Ireland, and further details of these will no doubt appear later, while from the east coast of England large numbers are reported below, and that the birds were driven far inland over a wide area is evident by the reports already to hand. It would seem, however, that the numbers in 1895 were greater, though the birds were perhaps not driven so far inland in that year.

SCOTLAND.—Mr. H. W. Robinson writes : “ Off the Bass Rock several hundred were seen at once, many being eaten by the Black-backed Gulls in attendance. Thirty-six dead bodies were picked up on the small portion of beach between Joppa and Leith breakwater, thirty more on Granton beach, whilst one Edinburgh taxidermist received over fifty for preservation.”

YORKSHIRE.—Mr. T. H. Nelson writes from Redcar : “ On January 20th (there had been a strong easterly wind blowing for two or three days, and I was in the house with a severe cold) my wife came in about noon, telling me that when on Coatham Sands, she had seen about forty Little Auks, in small parties, flying low down above the water just beyond the breakers. One lot of these came within five yards of where she was walking, and she noticed that they uttered a short little note ; another lot of five also passed close by her, and yet another party alighted on the sea near a wrecked steamer. Later in the day she found a very fine specimen washed up at high-water mark. After this date evidence was daily supplied of the finding of numerous examples of these little visitors ; one man picked up a dozen in the course of a mile walk, and many other persons reported seeing dead or exhausted birds on the sands, which had evidently been driven ashore. The local bird-stuffers had scores brought to them, and would only accept those that were very fine and clean. I had numerous inquiries as to the species of these peculiar little birds. The weather continued stormy, and on February 1st a blizzard of arctic severity, with a north-easterly gale, swept the coast, continuing for three days. Hundreds of Little Auks were seen flying before the storm, and many were found on the beach between Saltburn and the Tees mouth. Reports of ‘ rare arctic birds ’ were also sent from inland places remote from the coast, as for example, Thirsk, Northallerton, East Layton near Richmond, Yarm, Hutton Rudby, and along the foot of the Cleveland Hills at Rounton, Swainby, Stokesley and in the Esk Valley ; also at Linthorpe, Middlesbrough, Guisborough, and the villages between the coast and the moorlands. Not only in

this immediate locality, but also from further north on the coast into Durham and Northumberland, and south to Whitby and Scarborough, every day furnishes additional proof of the phenomenal nature of this invasion of the little northern sea-fowl, for a precedent for which we must look back to the year 1895."

Mr. Bentley Beetham reports one from the river Greta, far inland near Barnard Castle, and Mr. M. Winzar Compton tells me of two picked up alive at Keyingham, eight miles from the coast, on January 18th and February 2nd.

From the Spurn district of Holderness, Mr. G. E. Clubley writes that he had seen twenty-six dead, sixteen of which were in one small pond near the sea, while he believes that numbers more were washed up on the beach. A specimen sent to me on February 4th by Mr. Clubley was not particularly thin, but the gizzard was empty.

LANCASHIRE.—Mr. T. A. Coward informs me that Mr. F. Williamson reports (*Lancs. Nat.*, 1912, p. 385) one found alive at Rochdale on February 1st, and another at Smallbridge, Rochdale, on February 5th.

LINCOLNSHIRE.—The Rev. F. L. Blathwayt writes: "The immigration of Little Auks has extended far inland in the county. A Lincoln bird-stuffer received more than twelve, mostly from around the city, between the dates January 24th and February 12th, and many more have been picked up. Mr. Kew, a Louth bird-stuffer, had twenty-two up to February 14th from different parts of the 'Marsh' district near Louth. The first reached him on November 23rd, 1911."

NOTTINGHAMSHIRE.—"One was sent by Mr. Hamilton from near Newark to Mr. A. F. Adsetts on February 8th." (F. C. R. Jourdain).

DERBYSHIRE—"The first of which I have a definite record was caught alive at Ripley by Mr. Marshall and sent by him to Mr. A. F. Adsetts on February 1st. On February 3rd another was sent from Shardlow to Messrs. Hutchinson. A third was found alive, during a snowstorm, in the locomotive sheds at Derby station, and was brought to Mr. Adsetts on the 8th, while a fourth was sent to Messrs. Hutchinson from Draycott on the 9th. A fifth was obtained in the Matlock district in February, but I have not yet been able to ascertain any further particulars." (F. C. R. Jourdain).

CHESHIRE.—Mr. A. Newstead writes: "On February 3rd, whilst looking for stray birds, I was surprised to fix my glasses on to a specimen of the Little Auk swimming rather rapidly in the middle of Dee, practically only a stone's-throw from

Chester. For some time it made no attempt to come nearer to the edge of the river; however, eventually it flew a few yards, and dropped again, apparently exhausted. A little later on in the afternoon of the same day it had made its way nearer to the old Dee bridge, and was killed by some boys, from whom it was purchased and presented to the Chester Museum by Professor R. Newstead, together with a second specimen picked up at the river's edge—dead—on February 4th. The stomach of one specimen contained only the roots of plants, the other was quite empty."

Mr. T. A. Coward reports one taken alive at Mere near Knutsford, on February 2nd, and another at Cuddington, near Northwich, about February 6th.

NORFOLK.—Mr. J. H. Gurney writes: "They were first heard of at Cley on January 20th. Mr. Gunn, of Norwich, had one from Wells on the 23rd, one was found in a field at Northrepps on the 24th, three at Overstrand on the 26th, while from Cley, Mr. Pashley wrote to me that hundreds were supposed to have passed Blakeney; more than forty were counted from the beach in an hour or two on the 26th, several being picked up exhausted, and others seen to fly inland. Three were reported by Sir Digby Pigott from Sheringham on February 2nd; Mr. Gunn, of Norwich, had had thirteen by the 8th, and Mr. Saunders, of Yarmouth, sixteen by the 9th, Mr. Roberts six." Specimens kindly sent to me by Mr. Gurney (Northrepps, February 3rd, Ruston, February 7th, Yarmouth, February 8th) were all very thin and had no food in their gizzards.

SUFFOLK.—Dr. C. B. Ticehurst writes from Lowestoft that numbers were picked up. Mr. Bunn, of Lowestoft, had seven brought in to him (*Angler's News*, 10.II.1912, p. 201). Mr. Gurney tells me of six from Aldeburgh.

NORTHAMPTONSHIRE.—"One found near Kettering on February 3rd and another at Kettering 'last week.'" (C. E. Wright, *Zool.*, 1912, p. 74)

LEICESTERSHIRE.—"One was sent to Messrs. Hutchinson for preservation from Ashby-de-la-Zouch and arrived on February 9th, having probably been found on the previous day." (F. C. R. Jourdain.)

WARWICKSHIRE.—Mr. Leigh writes that one was found alive at Small Heath, Birmingham, on February 3rd, and that another was reported at Coventry on February 2nd.

WORCESTERSHIRE.—Mr. Leigh also tells me of specimens being reported from Evesham and Harvington.

STAFFORDSHIRE.—Mr. W. Wells Bladen writes : “ On February 2nd, on the morning of which day we had a north-easterly blizzard with ten degrees of frost, a Little Auk (*Mer- gulus alle*), which had been found on the frozen canal at Stone, was brought to me. It was entirely uninjured and very lively ; not at all shy, as it pecked at my finger when I fed it with tiny morsels of whiting. During the following afternoon it became very restless, and in the evening died. Previous records for the county are : Several on the Trent in 1843 ; one, Walsall, 1870 ; one, Wheaton Aston, Jan., 1901 ; one in a collection at Wyeley Grove.”

Mr. A. G. Leigh reports that one was found dead at Handsworth, Birmingham, on February 3rd.

SHROPSHIRE.—Mr. H. E. Forrest writes : “ One was seen on the Severn at Melverley on February 1st, the following day one was caught alive on the road near Wem, whilst another was seen swimming and diving in the river beneath one of the bridges in Shrewsbury, eventually flying off down stream. On the 5th one was brought to a local taxidermist from Cres-sage—possibly the same bird.”

Mr. A. G. Leigh reports one from Bridgnorth on February 5th.

GLOUCESTERSHIRE.—One is reported from Cirencester as caught in a garden by the river on February 2nd (*Field*, 10.II.1912).

HERTFORDSHIRE.—Mr. T. A. Coward tells me that Mr. F. J. Stubbs reported one to him from Tring on February 4th.

SURREY.—One is reported as picked up alive on Ford Manor Estate on February 2nd (*Field*, 10.II.1912).

KENT.—“ One was picked up on the shore at Dungeness on January 24th, and one at Ulcombe and another at Snodland during the frost.” (N. F. Ticehurst.)

SUSSEX.—“ One was picked up at Littlehampton on January 23rd.” (N. F. Ticehurst.)

Specimens reported in November and December, 1911 (*cf. supra*, pp. 230 and 252) can hardly be regarded as having any connection with the present movement.—H.F.W.

SLAVONIAN GREBES IN MONTGOMERYSHIRE AND SHROPSHIRE.

MR. W. HAMPSON informs me that on February 6th, 1912, his son shot two Grebes on Lake Vyrnwy of a species unknown to him or the keepers. Another was shot on the same lake by Mr. P. M. Evans on February 21st. They were sent for preservation to Mr. F. Coburn, Birmingham, who identified

them as Slavonian Grebes (*Podiceps auritus*). The occurrence is worthy of note, since this species has only once before been recorded in Montgomeryshire (cf. *Fauna N. Wales*, p. 245). Mr. Hampson adds that on the 8th there was a party of Goosanders on the lake.

I have since learned that about the same date another Slavonian Grebe was obtained about two miles from Clun, in south-west Shropshire, another on the Severn just above Shrewsbury on February 13th, and a third near Church Stretton on the 15th. Although this species has frequently been recorded in the county, not one appears to have been met with until now since November, 1894, when a specimen was shot on the Severn, some four miles north-west of Shrewsbury.

H. E. FORREST.

FULMARS IN ORKNEY.


WITH reference to my note on the dates of arrival of Fulmars (*Fulmarus glacialis*) in Orkney (*supra*, p. 228), I omitted to state that in 1908 there were Fulmars on Hoy Head at the new year—indeed a pair in my collection were shot there on January 2nd in that year.

H. W. ROBINSON.

[In the *Vertebrate Fauna of the Shetlands* (p. 210), Messrs. A. H. Evans and Buckley state that, to judge from Mr. F. Traill's observations, Fulmars "are quite common out at sea in winter, and betake themselves to the land as soon as January commences, nearly all the migrants having arrived by February." I am much indebted to Mr. W. Evans for drawing my attention to an error in the date of the establishment of the Hoy Head colony, which I referred to on pages 142 and 199 as 1891. I much regret to say that this is a mistake, which arose from a misquotation in the articles on "Additions" by Dr. N. F. Ticehurst and myself (Vol. II., p. 374). We quoted from Mr. Harvie-Brown's *Fauna of the North-west Highlands* (1904), where we are told, on page 359, that since the Orkney volume was issued (i.e. since 1891) Hoy Head had been occupied, but no exact date is given, nor perhaps obtainable, for the founding of this colony.—H.F.W.]

NORTHERN WILLOW-WARBLER IN HADDINGTON.—A male *Phylloscopus trochilus eversmanni* was taken at the Bass Rock Lighthouse on April 29th, 1909 (W. Evans, *Scot. Nat.*, 1912, p. 44).

HAWFINCH BREEDING IN WEST LOTHIAN.—A young *Coccothraustes vulgaris* about twelve days old, was found on June 21st, 1911, in Dalmeny Park. The nest from which it had presumably fallen was found in the following December (B. Campbell, *Scot. Nat.*, 1912, p. 43).



REVIEWS



Avifauna Spitzbergensis. Forschungsreisen nach der Bären-Insel und dem Spitzbergen-Archipel, mit ihren faunistischen und floristischen Ergebnissen. Herausgegeben und verfasst von Alexander Koenig, Bonn, 1911. (Spezieller Teil. Bearbeitet von Dr. O. le Roi, pp. 113-294.) Berlin: W. Junk. 120 Marks.

THE results of Professor Koenig's three expeditions to Spitsbergen in 1905, 1907, and 1908, are enshrined in the handsome volume which now lies before us, copiously illustrated by numerous coloured plates, photogravures, and illustrations in the text. As the work extends to 294 pages ($12\frac{3}{4}$ by $10\frac{1}{2}$ in.) it will readily be seen that it is much more than an account of the scientific results and incidents connected with these voyages. The first 110 pages are indeed devoted to chronological accounts of the three expeditions, from the pen of Professor Koenig, and contain also many notes and observations on bird-life, but Dr. le Roi is responsible for the "Special Part," with which we are more directly concerned.

First comes a very complete bibliography of Bear Island and the Spitsbergen Archipelago from 1598 to 1910, with critical notes. This is an extremely sound and valuable piece of work, extending to twenty pages, and is followed by a list of the thirty-six species which have been recorded from Bear Island, with their status. A similar list of the fifty-two species recognized from Spitsbergen follows, about twenty-five of which have been ascertained to breed there regularly. Dr. le Roi then proceeds to treat each species in detail, giving an abstract of what has previously been recorded, together with critical remarks on the specimens obtained, as well as interesting field-notes and full descriptions of the eggs and nests obtained. One or two of these articles have special interest for English naturalists, among which the following may be mentioned:—

Kolthoff's isolated record of the Red-necked Phalarope, *Phalaropus hyperboreus*, was confirmed by the acquisition of a pair of birds in the delta of Advent Bay on June 29th-30th, 1907, and as the ovary of the hen contained well-developed eggs, there is little doubt that they were about to breed there. Although Sabine's Gull, *Xema sabini*, had previously been met with in the Spitsbergen group in the breeding-season, it had not been proved to nest there till Dr. le Roi found a nest with two eggs on July 7th, 1907, from which the parents were

shot. *Larus marinus* was observed on one occasion at Bear Island, the first definite record of this species, although the bird was not shot. Perhaps, however, the most interesting article is that on the Barnacle-Goose, *Bernicla leucopsis*. Hitherto nothing definite has been recorded as to the breeding of this species. Most of the eggs in collections are unauthentic or have been laid in confinement, and the only instance in which the bird is said to have been found nesting in a free state, is the supposed breeding on the Lofoden Isles in 1870. The evidence in this case, however, is not conclusive, and the eggs in Mr. Dresser's collection from this source are small compared with those obtained by Professor Koenig's party. There can, however, be no doubt whatever as to the authenticity of the twelve eggs obtained in 1907 and 1908, as the birds were clearly identified and shot from the nests, three of which were taken, containing five, four and three eggs respectively. They were placed on steep rock-bastions on the northern slopes of one of the side-valleys debouching on Advent Bay. These ramparts, separated from one another by water-worn gullies and broken up here and there into isolated stacks, have been formed by the gradual disintegration of the surrounding rock by weather-action, and stand out in succession along the sides of the valley. High up on these bluffs the Barnacle-Geese make their scanty nests and rear their young, secure from the attentions of the arctic foxes which range far and wide over the country. No doubt many pairs breed still higher on the cliffs which crown the upper slopes of the valley, but these nests were quite inaccessible, although in several cases the heads of the brooding birds could be clearly distinguished as they sat on their nests. The male birds were generally on guard beside their mates, but took to flight on the first appearance of danger, with warning cries of "Gra, gra, gra." It is interesting to compare this account with that given by Herr A. L. V. Manniche of the great breeding-place discovered by him on the Trekroner mountain in north-east Greenland, already referred to in these pages (*antea*, Vol. IV., p. 344). Dr. le Roi gives full details of the eggs taken, from which it appears that though decidedly larger on the average than those of the Brent, the measurements of the eggs of the two species overlap occasionally, but that the eggs of the Barnacle are always relatively heavier. Among other interesting records we note that the Starling (*Sturnus vulgaris*), the Blackbird (*Turdus merula*), and the Woodcock (*Scolopax rusticula*) are all recorded for the first time as stragglers to the group on the evidence of remains picked up. Two nests of the King-Eider (*Somateria spectabilis*)

were found ; the Wigeon (*Mareca penelope*) was observed, and the Teal (*Nettion crecca*) obtained on Spitsbergen, while the Razorbill (*Alca torda*) was definitely recorded from Bear Island.

In addition to numerous photogravures of arctic scenery and nesting-sites, there is a series of eleven well-executed coloured plates of birds by Keulemans, and the frontispiece to the work is a characteristic group of Little Auks by Thorburn, with a distant view of Advent Bay. A further set of twelve coloured plates of the heads, and in some cases the feet also, of various birds by H. Schultze is appended in order to show the exact colouring of the soft parts in life. Though from an artistic point of view these are inferior to Keulemans's work, they are nevertheless most valuable as trustworthy records. The ten plates which illustrate the more remarkable eggs taken are by Krause, and could hardly be improved upon. Finally, there is an excellent map of the group on a scale of 1 : 2,000,000, on which the routes taken on the three voyages are carefully laid down.

Although Professor Koenig naturally uses the German form of the word Spitsbergen (in which the "s" is replaced by "z"), we suggest that in Latinizing the name the spelling of its Dutch discoverer, Barents, should be followed more closely, especially as the letter "z" forms no part of the Latin alphabet.

We congratulate Professor Koenig and Dr. le Roi on the completion of a work which must remain the standard one on the ornithology of Spitsbergen for many years to come.

F. C. R. JOURDAIN.



LETTERS



DUNLIN OR DUNLING ?

To the Editors of BRITISH BIRDS.

SIRS,—I have no desire to prolong a discussion on this subject, but I do not like to see my views misrepresented as they are in your editorial note to my last letter.

The “inconsistency” with which I am credited is based on the assumption that, while deprecating the constant changes which are being made in Latin names, I am approving changes in English ones. But that is not so. I propose no new English names. My critics have failed to note the essential difference between substituting one Latin word for another and spelling an English word properly. How the latter course (for which I have quoted precedents) can “make ornithology more confusing,” I fail to see. This really is the gist of the matter, and I need say no more.

J. F. HARTING.

SIRS,—I hold no brief for Mr. Harting, and being no philologist I am content to leave the elucidation of such matters to others, but in our arguments let us at least be logical. You, Sirs, are now “sticklers for priority” as regards scientific names, but yet when it is proposed to carry out similar ideas for English names you are at once most strongly against such a proposal.

In the case of English names, no confusion from the change can possibly arise, as there is no transference of name from one species to another, but merely a slight alteration of spelling. Scientists, and under that term we may include ornithologists, are supposed to be men of education, and for such to persist in spelling a name wrong when they know it to be so, should be a disgrace. What, Sirs, would you think of me were I to address this letter to “Igh Olborn”? Yet the “g” in Dunling has been elided in precisely the same way as many people fail to pronounce the “H.” You yourselves use the corrected spelling for “Redpoll” and “Coal-Tit.” Why not “Dunling”?

J. LEWIS BONHOTE.

[The real question, so far as we are concerned, in this controversy is not simply whether “Dunlin” should be spelt “Dunling,” but whether the colloquial names of all our birds should be revised in accordance with the “rules” of philology so as to elucidate their original meaning. We have already indicated where such a course of action would be likely to lead us. We cannot be held responsible for using

the spellings "Coal-Tit" and "Redpoll," since these names were so spelt in standard works a good many years before our Magazine came into existence.

Priority in scientific names is of great importance scientifically, and is fixed by International Rules, but priority in colloquial names is of no zoological importance at all; and so far as we can see (*pace* Mr. Harting) there are no rules to govern us, should we turn our hands to correcting the spelling of English names and deciding which form should be adopted. Mr. Bonhote compares the spelling of "Dunlin" without a final "g" to that of "High Holborn" without the initial "H." It is sufficient to point out that the former is the spelling adopted in every standard work on ornithology, with the exception of one work by Professor Newton and Mr. Harting's later edition of his *Handbook*, though in his earlier works he wrote the word as we do. To drop the "H" in "Holborn" would be simply a vulgarism for which there is no authority, so that there is no parallel between the two cases—EDS.]



DIPPER WITH FOOD FOR ITS YOUNG.
(*Photographed by Arthur Brook.*)

BRITISH BIRDS

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ASSISTED BY

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THE DIPPER AT THE NEST.

BY

ARTHUR BROOK.

[PLATE 5.]

THE nest of the Dipper (*Cinclus aquaticus*) figured here was built upon the side of a wild Welsh stream, and contained callow young on April 12th, 1911. The birds at this nest were by no means shy, and I was able to obtain a series of photographs of them. We had pre-



THE PAIR OF DIPPERS.

(Photographed by Arthur Brook.)

viously placed a stone beneath the nest for the birds to settle upon, and this was much appreciated by the old Dippers, which used to stand upon it whilst feeding the young. I was hidden within three yards of the nest, and had a fine view of the chestnut colour on the lower-breast of the bird as it stood upon the stone.

After feeding the young, the parent would fly, with Kingfisher-like flight, to the nearest ford and commence wading up stream, disappearing beneath the surface every now and then in search of food. Several times



DIPPER ABOUT TO FEED ITS YOUNG.
(*Photographed by Arthur Brook.*)



TWO YOUNG DIPPERS.
(*Photographed by Arthur Brook.*)

the pair of birds absented themselves from the nest for about twenty minutes, and I noticed that they generally flew up stream when they left the nest.

In mid-stream a piece of turf had fallen, forming a small island, to which the Dippers would resort and burst forth into song. I was fortunate enough to obtain a photograph of the pair of birds together upon this little island.

Young Dippers can swim and dive before they are fully fledged. Upon one occasion I was about to examine a nest, built beneath a bridge about ten feet above a stream. Before I could place my hand inside the nest, the young birds scrambled out and dived into the water beneath. The water, being very clear, afforded a good view of them. They swam for some distance beneath the surface, using their wings to propel themselves, after the manner of the old ones when in pursuit of prey. Upon reaching the surface one of the young birds swam strongly to a small rock and stood upon it. It was a most entertaining sight to see the young bird perched upon the rock, "bobbing" in approved Dipper style.

Dippers are very partial to their nesting-sites. I have in mind a nest from which six clutches of eggs were taken by schoolboys in one season. Two broods are often reared in the same nest in one season, a new lining of leaves being the only addition.

SOME RESULTS OBTAINED BY "RINGING" STARLINGS.

BY
N. H. JOY.

BETWEEN May, 1910, and February 11th, 1912, I "ringed" one thousand six hundred and ninety-six Starlings (*Sturnus vulgaris*) within one mile of this house, at Bradfield, Berkshire, about eight miles due west of Reading. Most of these birds have been caught in a cage-trap made after the description given by Dr. C. B. Ticehurst in BRITISH BIRDS, Vol. IV., p. 237, but with a door at the side large enough to admit a man. This I found very necessary, as it took too long to catch some thirty or forty birds (a not unusual number to be in the trap at one time) with a net. The trap was set in a large chicken-run, and was baited with the usual chicken-food and refuse from the kitchen. It was seldom attended to more often than three times a day, a quite insufficient number of times, as was often proved by leaving several marked birds in the trap, and finding at the next visit they had all escaped. Probably owing to this, some birds got to know the exit quite well, and used to fly out deliberately, even though I ran up to them clapping my hands. About two hundred and fifty birds were taken in another trap which was set only on a very few occasions, and fifty-four nestlings from nesting-boxes were "ringed." The following is a list of the birds marked at different times of the year :—

Summer 1910, nestlings	..	..	..	..	42
January 12th-February 14th, 1911	..	..	..	..	568
May to July, 1911, young and nestlings	..	..	..	..	99
Ditto adults	..	..	..	..	7
October and November, 1911..	..	..	..	..	92
December 12th, 1911, to February 11th, 1912	..	..	..	..	888

Of the 1910 nestlings, four have been recaptured here on the following dates : January 13th, 1911, two ; October 14th and December 26th, 1911, two : i.e. 4.76 per cent. were recovered in the first winter and about 10 per cent. up to date.

Of the nestlings and young in first plumage marked in the summer 1911, five, or 4.8 per cent., turned up during last autumn and winter, practically the same percentage as in the case of the 1910 nestlings. It seems evident that only a small proportion of birds bred here remain in the close neighbourhood, as otherwise I think a larger number would have been recaptured by now.

Of the Starlings marked in January and February, 1911, ninety-seven, or about 17 per cent., have been recovered here more than two months after the date of "ringing," nine during the breeding-season 1911, seven during October and November, and eighty-one during the winter from December 13th, 1911, to February 11th, 1912. That some, and probably a large number, of the Starlings "ringed" during the winter are migrants, or at any rate wanderers from a distance, the four following records show :—

C234, marked	1.2.1911,	found at	Gillingham, Kent,	20.2.1911
16078	„	19.1.1912	„ dead, probably a few days, at	
			Loughton, Essex	2.2.1912
16454	„	7.2.1912	„ at Reading	29.2.1912
11852	„	22.1.1911	„ „ Hounslow Heath	2.10.1911

The first rush of fresh birds to this neighbourhood appeared a day or two before Christmas, 1911, and undoubtedly new birds were constantly arriving during January and February, 1912. The number of birds recaptured which had been marked during January and February, 1911, varied very much on different days.

On January 8th, 1912, eight out of 28 were marked in January and February, 1911.

On January 9th, 1912, seven	„	16	„	„	„	„
On January 10th, 1912, nine	„	17	„	„	„	„

All these were different birds. However, on January 19th, during a snow-storm, out of twenty-five Starlings caught, only two had last winter's rings on. On account of illness the trap was not set again until the hard frost of January 28th, when thirty-six were captured, seventeen proving to be "ringed" birds; nine of these were last winter's birds which had not been caught before this winter, five had been marked during November and

December, 1911, and the rest more recently. On February 5th, during very hard frost, only two out of ninety birds were last winter's, and two of December, 1911, although some of the latter might have been overlooked among the twenty-five or so with quite recent rings on. On February 9th, of seventeen birds in the trap not one had been “ringed” before. I think these last facts prove that the Starling population here was constantly changing, especially so during the hard frost. It is also probable that most of the birds marked during October and November, 1911, soon moved away, as only eight, or 9.6 per cent., are recorded again between January 28th and February 11th, 1912, the period of hard frost, when five hundred and fifty-six fresh birds were marked. A few, however, may have been overlooked, as I did not have time to examine every “ringed” bird in the cage, but only looked at the number in the case of somewhat worn rings.

It is interesting to note that I only caught six of the “two-winter” birds a second time this winter, a fact which also seems to suggest that they were only passing through on migration, as if they had stopped long they would certainly have been taken in the trap more often, especially during hard weather.*

It is impossible yet to tell where the birds “ringed” in the winter 1911, and recaptured in the autumn and winter 1911-12, have their summer quarters, but as there are now over seventy of these at large some evidence on this point ought to be soon forthcoming. Some probably did not leave the close neighbourhood, as a few “ringed” at the same time were killed during the summer.

The following record is of some interest, if only as a curious coincidence: Of fourteen birds “ringed” on January 28th, 1911, three were retaken on the same date, 1912, and were not seen at any other time.

* I have on several occasions found that a particular Starling has entered the trap for several days in succession, or even twice on one day.

MANX ORNITHOLOGICAL NOTES, 1909-12.

BY

F. S. GRAVES AND P. G. RALFE.

THE following information is intended to continue the ornithological record for the Isle of Man from the end of the period covered by the article in *BRITISH BIRDS*, Vol. III., pp. 215-18, to the end of the year 1911.

Within these three years the Tree-Pipit has been recognized almost certainly as a nesting species, and the breeding of the Common Sandpiper and Common Tern established. The first specimen of the Hen-Harrier has been recorded. The status of some common British small birds still, however, remains uncertain.

REDSTART (*Ruticilla phœnicurus*).—On April 30th, 1911, in the Curragh, the son of Graves called his attention to a strange bird, which proved to be a male of this species. A female was seen by Mr. M. V. Wenner at Injebreck on April 29th, 1911.

BLUE TITMOUSE (*Parus cæruleus*).—Now by far the commonest Tit in the Island; in every district, and still increasing in numbers.

GREY WAGTAIL (*Motacilla melanope*).—More frequent as a breeding species than we believed when *Birds of the Isle of Man* was written. Nests on the Douglas River at the Nunnery, and on Ballure stream near Ramsey.

TREE-PIPIT (*Anthus trivialis*).—On June 3rd, 1911, while fishing at Injebreck Reservoir, West Baldwin, Graves repeatedly heard the familiar song of this bird. Next day he and Mr. M. V. Wenner both saw and heard the bird, its song and short characteristic flights from a tall ash leaving no doubt as to the identity of the species. On several later dates Mr. Wenner heard the song, and there seems little doubt that it was breeding. This is the first record of the species in the Isle of Man.

BRAMBLING (*Fringilla montifringilla*).—Seen and reported from various districts in winter.

TWITE (*Linota flavirostris*).—In 1908 Mr. J. Bell found a nest amid heather on the Ayre. He and other residents in Ramsey, who are well acquainted with the species through having kept it in captivity, have of late years met with it out of the breeding-season both on the mountains and lowland.

Ralfe has lately, through the kindness of Mrs. Roberts, of Castletown, seen an extract from *Once a Week*, 12th May, 1866, in which her father, the late Mr. J. M. Jeffcott, throws some light upon the nesting of the species in Man, for the article no doubt relates to the Island. He says that he never saw Twites in winter, but had observed small parties in early spring. “In summer, Twites are exceedingly shy, and within a large extent of moor where they breed, it is seldom that more than two or three pairs are to be found.” He had once only found a nest, which had six eggs.

CROSSBILL (*Loxia curvirostra*).—For occurrences in 1909, see **BRITISH BIRDS**, Vol. III., p. 305.

CHOUGH (*Pyrrhocorax graculus*).—In a lonely inlet of the west coast, an old mine-working opens half-way up the face of the cliff. High in the lofty but narrow crevice (partly natural, partly artificial) a window, so to speak, still half-framed in timber, opens through the wall of rock to the outer air, and on its sill is annually placed the nest of a Chough, easily visible from the inside against the light of the opening. In this neighbourhood, in 1911, I saw within one and a half miles three nesting-sites, a second being in a cliff surmounting a long rocky brow, and the third in the roof of a rock-arch under which the sea flows at high tide. At a nesting-site mentioned on p. 86 of *Birds of the Isle of Man*, the shelf used in 1877 was, in 1911, occupied by a Chough's nest, which contained four eggs.

Several of the artificial sites described in the same book are now unoccupied. The building in the illustration opposite p. 314 has been pulled down. On October 26th, 1911, Graves saw sixteen Choughs

and six Grey Crows, feeding in company in a field near Ballamoar.

ROOK (*Corvus frugilegus*).—Graves notes two occupied Rook's nests in 1910 in "Monkey Puzzles" (Chilian Pine) at Ballagarraghyn (German). There are Rookeries (not mentioned in Ralfe's list) at Tosaby (Malew), Ballakillee (Rushen), very small and recent, and Stockfield (German). Mr. T. Cubbon, who called attention to the last-mentioned, names another at Cooil Injil (Marown) which existed at the date of Ralfe's list, but has since become extinct.

CUCKOO (*Cuculus canorus*).—So little is known about Manx foster-parents of the Cuckoo, other than the Meadow-Pipit, that it may be worth mentioning that Mr. Wenner found a young bird in the nest of a Sedge-Warbler in Greeba Curragh in 1911.

HEN-HARRIER (*Circus cyaneus*).—The first known Manx occurrence is recorded in BRITISH BIRDS, Vol. III., p. 338.

GADWALL (*Anas strepera*).—On November 6th, 1911, a male in fine plumage was shot by Mr. E. Turner on the tide-pools at Lang Ness: the second Manx record.

STOCK-DOVE (*Columba ænas*).—Seems to be increased in numbers, both in summer and winter. Mr. F. A. Craine reports nests at Clay Head; Graves saw twenty to thirty coming in to roost in September, 1911, in plantations near St. Johns. Most of those he has shot were birds of the year.

PURPLE SANDPIPER (*Tringa maritima*).—Mr. H. Mackenzie tells Ralfe that when he was stationed at the Chickens Rock Light, a party of these birds regularly visited the rock (nearly a mile from shore) when uncovered by the tide, during the period between August and December.

COMMON SANDPIPER (*Totanus hypoleucus*).—Graves had for years observed this species when fishing at the Reservoir in West Baldwin, but was not able to find a nest until June 5th, 1910, when he discovered one on a bracken-clad bank close to the water, with

four slightly incubated eggs. The following day these were accidentally broken, but on the 23rd of the same month there was another nest with four eggs on the same bank near the old site. This is the first record of the breeding of the species in the Isle of Man. In 1911 the birds were at the place on April 15th, and subsequently. No nest was found, and Graves thinks the birds did not breed this year.

The species occurs commonly on spring and autumn migration, both inland and on the coast. Graves has seen a party of twenty to thirty at White Strand, near Peel.

COMMON TERN (*Sterna fluviatilis*).—Regarding a small colony in the Island, see Mr. M. V. Wenner in *BRITISH BIRDS*, Vol. V., p. 80. On July 5th in the same year the nesting-place, which is subject to much disturbance, seemed to have been forsaken by all Terns.

HERRING-GULL (*Larus argentatus*).—This very abundant bird is extending its breeding-range. Mr. F. A. Craine has pointed out a comparatively recent colony on Clay Head, and of late years there have been a few nests on Lang Ness. The species is now in strong disfavour among farmers. Some even assert that it destroys new-born lambs. Ralfe has seen wild Herring-Gulls feed from a dish held in a lady's hands at Castletown.

GREAT BLACK-BACKED GULL (*Larus marinus*).—In July, 1911, a pair flying around an isolated stack on the west coast behaved in such a way as to make it almost certain that there were young in the neighbourhood. There were empty and trodden-down nests on this stack. In spite of repeated assertions, the species has not yet been proved to breed in Man. At Christmas-time, 1911, Ralfe saw about thirty with Herring-Gulls on Ramsey shore; at least twenty were mature birds.

GREAT SKUA (*Megalestris catarrhactes*).—On February 25th, 1910, a specimen was caught on a baited hook seven or eight miles off Maughold Head, by fishermen

of the boat "Caribou," and found its way to the Ramsey Museum (*I. of M. Nat. Hist. and Ant. Soc. Zool. Report*, 1909-10).

PUFFIN (*Fratercula arctica*).—In 1911, Mr. Wenner and Ralfe found a few pairs breeding at Maughold Head.

GREAT CRESTED GREBE (*Podiceps cristatus*).—On July 15th, 1910, an adult female was taken in a dying condition from a tide-pool near Castletown Pier by T. Kelly, assistant harbour-master, who gave it to Ralfe. Mr. F. W. Leach, of Douglas, identified an immature bird which had been found dead or dying on Douglas shore on February 9th, 1911.

MANX SHEARWATER (*Puffinus anglorum*).—When crossing to and from the Island, as he frequently does, Graves has seen birds of the species between April 29th and September 20th (these being the extreme dates) during the last three years, and from Douglas Bay to the Bar Lightship at the mouth of the Mersey. On one occasion there were about one hundred feeding close together. He is of opinion that these are not migrating birds, as has been stated.

NOTES

ABNORMALLY EARLY WHEATEARS IN CARNARVONSHIRE.

THE genial atmospheric conditions and almost uninterrupted southerly and south-westerly winds during the latter half of February, 1912, helped to set in motion the seasonal movement of a few of the recognised earlier-moving migrants, and apparently urged a few Common Wheatears (*Saxicola ænanthe ænanthe*) to venture northward. At 3.15 p.m. on March 1st I watched a male on the Great Orme's Head, a little to the south-east of the lighthouse, and on the following day I watched another male (possibly the bird seen the previous day) at the extreme north-westerly point of the promontory. Another Wheatear, however, was seen on the 1st by a friend of mine, who is as familiar with the bird as I am, just an hour earlier, but nearly a mile away from the spot where I observed mine. My previous earliest date was March 21st, in 1909.

RICHARD W. JONES.

STONECHAT INLAND IN RENFREWSHIRE.

ON March 3rd, 1912, I saw near Kilmalcolm a fine male Stonechat (*Pratincola rubicola*), a bird of very rare occurrence inland in Renfrewshire.

T. THORNTON MACKETH.

BLACK REDSTART IN CARNARVONSHIRE.

ON March 1st, 1912, I had the good fortune to watch for some considerable time a fine male Black Redstart (*Ruticilla titys*) on the north-easterly side of the Great Orme's Head. The white patch on each wing drew my attention to the bird as it flitted about the rough and stony cliff-top, where apparently it was getting plenty to eat. The short, downward jerk of its ruddy tail was indulged in whenever it alighted on any point of vantage, and its movements forwards and backwards over the turf were quick.

One female of this species in 1910 and another in 1911 (cf. Vol. IV., pp. 308-9, and *supra*, p. 224) are the only occurrences of individuals of that sex in Carnarvonshire, but the present record of a male is unprecedented.

RICHARD W. JONES.

EARLY ARRIVAL OF THE CHIFFCHAFF IN
SHROPSHIRE.

A CHIFFCHAFF (*Phylloscopus rufus*) was heard at Petton Park, eight miles north of Shrewsbury on March 13th, 1912. The following day one was heard in Shrewsbury and another at Dowles near Bewdley. I have kept records for the last fifteen years and find the average date of arrival in Shropshire is March 27th. The earliest previous record was March 20th, 1910.

H. E. FORREST.

CROSSBILLS IN WARWICKSHIRE AND
STAFFORDSHIRE.

ON December 24th, 1911, I watched for some time, in a small larch plantation at Hampton-in-Arden, a party of six Crossbills (*Loxia c. curvirostra*), and on the following morning (25th) they were again present in the same numbers. I was informed that one of a party of five had been shot whilst feeding in some Scotch pines, about three-quarters of a mile away. I was fortunate enough to secure this specimen, which was an adult male. The birds were not seen after the morning of the 25th.

Very few Crossbills appear to have visited Warwickshire during the irruption of 1909-10, and previous to this there appear to be less than half a dozen records of its occurrence in the county.

A. GEOFFREY LEIGH.

As the status of the Crossbill in Staffordshire is not well known, it may be of interest to record that one was seen on April 8th, 1911, near Stretton, and two on April 9th, but they were not observed again until July 31st, when some were heard, while on the next day two were seen. On December 7th one was shot out of a flock of twenty near Gnosall, and the keeper there stated that about a hundred had been near there for some time. On January 3rd, 1912, I saw nine near Chatwell, on the 11th five at Woodcote, and on the 26th four were seen at Stretton. It seems probable that these birds were migrants and were not connected with the great irruption of 1909-10.

F. A. MONCKTON.

THE FACIAL FEATHERS OF THE ROOK.

A PET Rook (*Corvus frugilegus*) which came into my possession early in May, 1910, died early in January, 1912, and as I had taken note of its changes of plumage up to date, it is rather disappointing that it did not live to become adult. It had almost complete liberty, and until a short time before death kept itself in excellent condition.

When obtained, it had almost completed the juvenile plumage—only a few traces of down remaining. The first stage of the autumn-moult commenced about the middle of July, by the shedding of some feathers at the junction of the forehead and bill. New and more upright feathers began to grow all over the forehead. This had the effect of completely altering the contour of the face, in that the smooth and regular shape gave place to a more uneven and bristly appearance. During the moult *none* of the *nostril*- or *chin*-feathers were shed.

The second autumn-moult commenced about the end of July, 1911, when the flight- and tail-feathers were gradually dropped and replaced, and in September and October the whole body underwent a complete moult. At this time the bill began to show a little whiteness about the nostrils and the base of the lower mandible, caused by the dropping out of some of these feathers. The feathers on the chin also began to drop out. This continued right on through the last two months of the year; those of the nostrils and the base of the bill not being replaced, while those of the chin were to some extent replaced by new feathers. WALTER STEWART.

CORMORANT IN SHROPSHIRE.

ALTHOUGH the Cormorant (*Phalacrocorax carbo*) is a frequent visitor to the meres of north Shropshire, it is rarely met with in the southern half of the county. It may therefore be worth recording that at the end of January, 1912, an immature bird of this species was shot on the Teme near Ludlow.

H. E. FORREST.

SHAG IN WORCESTERSHIRE.

ON January 27th, 1912, a man named John Coldrick, of Bewdley, Worcestershire, shot a Shag (*Phalacrocorax graculus*) in the Dowles Brook, which forms the boundary between Worcestershire and Shropshire (so perhaps the specimen may be regarded as an occurrence for both counties). Owing to the kindness of Messrs. Spicer and Sons, the Birmingham taxidermists, I was able to examine the bird soon after being set up. It proved on dissection to be a male, and was of a dull brown on the under-parts.

BERNARD STARLEY.

[This occurrence should be compared with those recorded by Mr. Coward in our last issue (p. 279).—EDS.]

SUPPOSED FORMER ABUNDANCE OF THE GLOSSY IBIS.

THE story that the Glossy Ibis (*Plegadis falcinellus*) was once common enough in Norfolk to be called the "Black Curlew,"

referred to by the Rev. F. C. R. Jourdain (*supra*, p. 274), rests on rather slender evidence, viz. the recollections of Charles Girdlestone, a sportsman-naturalist, who died in 1831 (see *Fauna of Norfolk* by the Rev. R. Lubbock, new ed., 1879, pp. xvii and 53). Lubbock, writing in 1824, remarks that forty years back Glossy Ibises "were, I am told, known to the gunners about Lynn Regis, etc., by the appellation of Black Curlews." This is on his friend Girdlestone's authority, but it meets with no confirmation from other sources, and does not deserve to be quoted as if it were an accepted fact, as has been done by several writers. That Glossy Ibises were somewhat less of a rarity in 1780 than they are now is not improbable, as there were more marshes then, but I cannot think that they could ever have been abundant enough to have earned a local sobriquet.

J. H. GURNEY.

TURNSTONE IN OXFORDSHIRE.

ON January 22nd, 1912, Mr. Darby, the Oxford taxidermist, showed me a Turnstone (*Streptilas interpres*) which had just been killed opposite Christchurch Meadow, almost in the town of Oxford. It was in immature plumage.

F. A. MONCKTON.

LITTLE STINTS IN WORCESTERSHIRE.

FIVE or six Little Stints (*Tringa minuta*) were seen in a damp meadow on the outskirts of Malvern in company with several Snipe. One bird was shot on February 6th, 1912, and given to me; I have passed it on to the Worcester Museum. It was in poor condition, and had doubtless experienced considerable difficulty in obtaining suitable food here during the hard frost.

NORMAN G. HADDEN.

BLACK-TAILED GODWIT IN YORKSHIRE.

ON February 3rd, 1912, my brother, Norman K. Duncan, shot a Black-tailed Godwit (*Limosa belgica*) on the north shore of the Humber, near Spurn. There were two birds together. The specimen procured is an immature male in winter plumage, having the mantle and scapulars uniform dark ashy-grey. The only previous winter record for Yorkshire that I can learn of was on December 9th, 1875 (see *Birds of Yorks.*, I., p. 642).

STANLEY DUNCAN.

BLACK-HEADED GULLS IN WORCESTERSHIRE.

ON February 8th, 1912, I saw four Black-headed Gulls (*Larus ridibundus*) at the Malvern sewage farm. "Gulls" were reported to me at this time in considerable numbers.

NORMAN G. HADDEN.

COMMON GULL IN WARWICKSHIRE.

ON February 8th, 1912, Messrs. Spicer and Sons, of Birmingham, received for preservation a specimen of the Common Gull (*Larus canus*). It was shot on the River Anker, at Nuneaton, and is a mature male.

BERNARD STARLEY.

THE 1912 "WRECK" OF THE LITTLE AUK.

THE following notes, read in conjunction with those which appeared in our last number (pp. 282-286), show that the Little Auks were driven far and wide across the country. They seem to have struck the coast in greatest numbers from Norfolk to the Firth of Forth, and it seems probable that those reported from western and midland counties travelled across the country from the east coast.

As was said in our last issue, the numbers which came to grief were apparently less than in 1895, but so far at all events as England is concerned they were, I think, "strewn" over a wider area this year than in 1895.—H.F.W.

LANARKSHIRE.—One at the end of January near Motherwell (*Glasgow Nat.*, IV., p. 63).

RENFREWSHIRE.—One was picked up near Kilmalcolm on February 18th; it had evidently struck the telegraph-wires, as it was lying underneath them. It was an adult female (T. Thornton Mackeith).

NORTHUMBERLAND.—MR. J. M. Charlton sends the following notes from the south-east coast:—"Jan. 8th-9th, 1912. Stormy. Blizzard. South-east winds. First Little Auks appeared in large numbers off St. Mary's Island close in to shore, swimming and protected from the waves by the island itself. On the 9th one was picked up and brought to me. Another was shot as it was flying south. Jan. 10.—Numbers passing south. Jan. 17.—Wind south-east, exceedingly strong. Two brought to me exhausted. Jan. 18.—South-east wind. Large numbers passing south in flocks of four to six. Some passed so close to the shore as to be pelted with stones by boys. Jan. 19.—Several picked up inland, Seaton Delaval (1½ miles inland) and Cullercoats. Several in Cullercoats Bay. Jan. 22.—Several passing south. Jan. 23.—Observed one at sea from fishing-boat; it was close by, and when on the surface appeared to use its wings as though it were swimming beneath the surface. Jan. 26.—One brought in, caught in front street of Cullercoats by boys.

"Feb. 2.—Great north-east gale, snow and frost. Thousands passing north during the height of gale, flying in small parties of two to four, never more, and often singly. They were flying hard to head into the gale, but some were quite 'done,' and settled on the rocks around us as we lay in wait for Brent Geese. Some passed so close as to be within reach of our guns had we held them up. On settling on the rocks they assumed a recumbent, not upright attitude. Several were caught hiding under stones, but some were less exhausted, and rose when almost within reach. Even when caught and placed on a stone they seemed at home, and lay quite quietly ruffling their feathers, shaking themselves and even preening their wings! All we examined were terribly thin and emaciated. A few were observed when the gale had abated, diving near the rocks and apparently chasing small fish which rose to the surface in their eagerness to escape when the Little Auk was below. Feb. 3.—Wind north-east by east, even heavier than Feb. 2. Hundreds of parties of two and three passing north in the same manner as yesterday. Feb. 4.—Dozens found dead on the shore, some frozen stiff, some alive. Gale abated, wind to south-east. Feb. 5.—Dull, mild; wind south-east. One caught alive.

"During this storm a few were found in the Newcastle streets. Mention is made in *Newcastle Daily Journal* of a 'colony' of three hundred in the third week in January passing south at Holy Island. The correspondent said that he saw the first early in December."

YORKSHIRE.—Over forty were brought to the local taxidermist at Beverley. (F. Boyes, *Field*, 17.II.1912, p. 304.)

LANCASHIRE.—One was picked up by the head water-bailiff on the River Lune near Lancaster on February 2nd, 1912. It was under the telegraph-wires, against which it had been killed, the head being completely severed from the body. (F. Smalley.)

"I can account for at least fifteen found near Lancaster. Mr. Harrison, the Lancaster taxidermist, received six for preservation, and Mr. Murray, the Carnforth taxidermist, seven, whilst I picked the remains of two others out of one rubbish heap close to the town, and have no doubt that a walk down the Lune estuary would have brought to light many more." (H. W. Robinson.)

CHESHIRE.—One was picked up dead in the village of Prestbury, near Macclesfield. (R. E. Knowles.)

CARNARVONSHIRE.—"I saw a single Little Auk on February 2nd, flying westward over the sands in Llandudno Bay.

The bird passed me quite close, and, in the strong north-easterly wind which was raging at the time, appeared to be uncertain whether to continue its course round the Great Orme's Head or to fly over the isthmus on which the town of Llandudno stands. I have neither heard nor seen it reported that other examples were seen in Carnarvonshire." (R. W. Jones.)

STAFFORDSHIRE.—Mr. G. H. Storer writes that one was caught alive at Burton-on-Trent, killed, and brought to Mr. C. Hanson, junr., on February 3rd.

NOTTINGHAMSHIRE.—Two were picked up near Mansfield. (J. Whitaker, *Field*, 24.II.1912, p. 400.)

WARWICKSHIRE.—“One was sent to Messrs. Spicer and Son, of Birmingham, on February 14th, for preservation. It was obtained near Nuneaton, and had probably been dead a week when I saw it on the date mentioned.” (B. Starley.)

WORCESTERSHIRE.—Two were caught near Evesham in the first week of February, one of which has been presented to the Worcester Museum. (N. G. Hadden.)

BUCKINGHAMSHIRE.—One was found, unable to fly, on the Chilterns at Ivinghoe on February 4th. (P. W. Horn, *Zool.*, 1912, p. 109.)

SUSSEX.—Two Little Auks were taken at sea off Eastbourne during the hard weather. One was caught in a fishing net. (E. C. Arnold.)

IRELAND.—Two were found alive in co. Dublin, one at Portmarnock, and one at Rathfarnham, during the first week of February. (A. R. Nichols, *Irish Nat.*, 1912, p. 63.) One at Lough Belvidere, Mullingar, on January 23rd; twenty seen (one shot) on a flooded field in co. Wicklow on February 2nd; two picked up dead near Graigue, co. Carlow. (W. J. Williams.)

GREAT NORTHERN DIVER IN STAFFORDSHIRE.

ON December 29th, 1911, I saw what I feel certain, by its very large size, was a Great Northern Diver (*Colymbus glacialis*) on Bellfield Reservoir; on January 2nd, 1912, there were two. I did not go there again until the 15th, when both were still there.

F. A. MONCKTON.

FORK-TAILED PETRELS IN WORCESTERSHIRE.

ON February 4th, 1912, I saw a Fork-tailed Petrel (*Procellaria leucorrhoa*) at Malvern, flying strongly in a southerly direction about fifteen feet from the ground. On the previous day another specimen was picked up in Worcester and brought to the Museum.

NORMAN G. HADDEN.

RECOVERY OF MARKED BIRDS.

IN ADDITION to those already acknowledged, I have received subscriptions towards the expenses of the "marking scheme" from Messrs. T. F. Greenwood, R. M. Barrington, H. L. Popham, C. F. Archibald, Chas. Collier, J. R. B. Masefield, Captain H. Lynes, Messrs. H. Noble, R. O. Blyth, Commander H. L. Cochrane, Captain J. S. T. Whitehead, Messrs. H. S. Greg, Edmund Page, M. Portal, J. Bartholomew, C. T. Cobbold, R. J. Ussher, W. C. Tait, W. Davies, Major-General V. Hatton, Mrs. Patteson, Messrs. W. Stewart, A. Bankes, J. H. Milne-Home, H. S. Gladstone, and Anonymous.—H. F. W.

SONG-THRUSH (*Turdus musicus*).—B.B., No. 6892, marked by Miss M. Garnett at Windermere, Westmorland, on February 5th, 1911, as an adult bird. Recovered at Kilkee, co. Clare, Ireland, on February 6th, 1912. Reported by Mr. R. Mannering.

BLACKBIRDS (*Turdus merula*).—B.B., No. 11429, marked by Mr. Murray (gamekeeper to Mr. H. S. Gladstone) at Capenoch, Thornhill, Dumfriesshire, on July 22nd, 1910, as a nestling. Recovered at Kilkeel, co. Down, about February 7th, 1912. Reported by Mr. J. Dawson.

B.B., No. 14707, marked by Miss C. M. Acland at Banstead, Surrey, on June 21st, 1911, as a young bird. Recovered at the same place in February, 1912.

ROBINS (*Erithacus rubecula*).—B.B., No. F589, marked by Mr. A. G. Leigh at Hampton-in-Arden, Warwickshire, on July 25th, 1911, as a young bird. Recovered at the same place on November 12th, 1911. Ring replaced and bird released.

B.B., No. C405, marked by Mr. W. T. Blackwood at Peebles, on May 21st, 1911, as a nestling. Recovered at the same place on November 8th, 1911.

B.B., No. B957, marked by Mr. W. E. Suggitt at Cleethorpes, Lincolnshire, on August 18th, 1910, as an immature bird. Recovered on February 4th, 1912, at the same place.

B.B., No. C357, marked as No. B957 on July 3rd, 1911. Recovered at the same place on February 4th, 1912.

B.B., No. D325, marked by Captain J. W. H. Seppings in York on June 29th, 1911, as an adult bird. Recovered at the same place on February 8th, 1912.

B.B., No. E578, marked by Mr. J. S. Elliott at Bewdley, Worcestershire, on June 23rd, 1911, as an adult bird. Recovered at the same place on February 10th, 1912.

HEDGE-SPARROWS (*Accentor modularis*).—B.B., No. C391, marked by Mr. W. T. Blackwood at Peebles on May 21st, 1911, as a nestling. Recovered at the same place on November 6th 1911. Reported by Mr. J. Ballantyne.

B.B., No. E252, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on July 19th, 1911, as an adult male. Recovered at the same place on January 3rd, 1912. Ring replaced and bird released.

B.B., No. A985, marked by Mr. A. Bankes at Salisbury, Wiltshire, on July 9th, 1911, as an adult. Recovered at same place on January 4th, 1912. Bird re-marked and released.

B.B., No. D307, marked by Mr. A. G. Leigh at Hampton-in-Arden, Warwickshire, on September 20th, 1911, as an adult. Recovered at same place on February 3rd, 1912. Ring replaced and bird released.

GREAT TITS (*Parus major*).—B.B., No. C747, marked by the North London Natural History Society at Woodford Green, Essex, on May 28th, 1911, as a nestling. Recovered at the same place on December 25th, 1911. Ring replaced and bird released. Reported by Mr. F. Reynolds.

B.B., No. 4974, marked by Mr. A. H. M. Cox at Plymouth, Devon, on May 28th, 1911, as an adult female. Recovered at the same place on February 2nd, 1912.

COAL-TIT (*Parus ater*).—B.B., No. C164, marked by Mrs. Patteson at Limsfield, Surrey, on January 14th, 1911. Recovered at the same place on February 1st, 1912.

BLUE TITS (*Parus cæruleus*).—B.B., No. A372, marked by Mr. A. Bankes at Salisbury, Wiltshire, on May 2nd, 1911. Recovered at the same place on January 9th, 1912.

B.B., No. 1409, marked by Mr. N. H. Joy at Bradfield, Berkshire on January 8th, 1911, as an adult male. Recovered at the same place on February 2nd, 1912.

B.B., No. C785, marked by the North London Natural History Society, at Hale End, Essex, on June 12th, 1911, as a nestling. Recovered at Cranbrook Park, Ilford, Essex, on March 10th, 1912. Reported by Mr. G. Hall.

PIED WAGTAIL (*Motacilla lugubris*).—B.B., No. C206, marked by Mr. N. H. Joy at Bradfield, Berkshire, on May 30th, 1911, as a nestling. Recovered at Reading, Berkshire, on February 2nd, 1912. Reported by Mr. F. J. Leader.

B.B., No. E741, marked by Mr. H. F. Witherby at Burley, Hampshire, on August 5th, 1911, as a nestling. Recovered at

Brockenhurst, Hampshire, on February 2nd, 1912. Reported by Mr. E. Cumberbatch.

GREENFINCHES (*Ligurinus chloris*).—B.B., No. 5073, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on June 24th, 1911, as a nestling. Recovered at Cove, near Aberdeen, on December 4th, 1911. Reported by Mr. H. Cameron.

B.B., No. H492, marked as No. 5073 on December 17th, 1911, as an adult. Recovered about half a mile from place where "ringed" about February 19th, 1912.

CHAFFINCHES (*Fringilla cælebs*).—B.B., No. F574, marked by Mr. M. Portal at Hexham, Northumberland, on July 15th, 1911, as a nestling. Recovered at the same place on January 24th, 1912.

B.B., No. F702, marked as No. F574 on July 25th, 1911, as an adult male. Recovered at Corbridge, Northumberland, on February 2nd, 1912.

B.B., No. F506, marked as No. F574 on July 7th, 1911. Recovered at the same place on February 4th, 1912.

B.B., No. 4451, marked as No. F574 on July 14th, 1911. Recovered at the same place on February 5th, 1912.

STARLINGS (*Sturnus vulgaris*).—B.B., No. 2999, marked by Mr. A. Bankes at Salisbury, Wiltshire, on May 4th, 1911, as an adult. Recovered at the same place on December 21st, 1911.

B.B., No. 10899, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on May 31st, 1911, as a nestling. Recovered near Letterkenny, co. Donegal, about January 20th, 1912. Reported by the Rev. W. Michael.

B.B., No. 2889, marked as No. 10899, on May 2nd, 1910, as an adult. Recovered at the same place on February 14th, 1912.

B.B., No. 2207, marked as a nestling by Mr. J. R. B. Masefield at Cheadle, Staffordshire, on July 11th, 1910. Recovered at the same place on March 21st, 1912.

TAWNY OWL (*Syrnium aluco*).—B.B., No. 8970, marked by Miss C. M. Acland at Banstead, Surrey, on May 7th, 1910, as a nestling. Recovered near Coulsdon, Surrey, on January 29th, 1912. Reported by Mr. H. A. Peckham.

CORMORANT (*Phalacrocorax carbo*).—B.B., No. 50122, marked by Mr. H. W. Robinson at the isle of Maleggan, Scilly Isles, on May 22nd, 1911, as a nestling. Recovered at the mouth of the Abervrach, Finistère, France, on December 26th, 1912. Reported by M. A. Messesson.

COMMON HERONS (*Ardea cinerea*).—B.B., No. 50215, marked by Mr. J. R. B. Masefield near Cheadle, Staffordshire, on June 23rd, 1911,

as a nestling. Recovered near Macclesfield, Cheshire, during January, 1912. Reported in the *Gamekeeper*.

B.B., No. 50204, marked as No. 50215, on May 27th, 1911, as a nestling. Recovered near Bakewell, Derbyshire, on September 5th, 1911. Reported by Mr. H. E. Weaver.

MALLARD (*Anas boscas*).—B.B., No. 565, marked by Mr. J. H. Gurney at Keswick, Norfolk, in June, 1909, as a young bird. Recovered at Hickling, Norfolk, about January 25th, 1912. Reported by Mr. J. Vincent.

B.B., No. 31222, marked by Mr. F. Smalley at Silverdale, north Lancashire, on June 1st, 1911, as a nestling. Recovered at Foulshaw, Westmorland, on December 30th, 1911. Reported by Mr. W. J. Sharp.

B.B., No. 31236, marked as No. 31222 on July 20th, 1911. Recovered at Milnthorpe, Westmorland, on December 24th, 1911. Reported by Lieut.-Colonel J. F. Bagot.

Twenty-one Mallard ringed by Mr. F. Smalley at Silverdale, north Lancashire, as nestlings on June 1st and July 20th, 1911. All recovered at the same place between September 20th, 1911, and January 29th, 1912.

WOOD-PIGEON (*Columba palumbus*).—B.B., No. 22346, marked by Mr. W. Stewart at Blantyre, Lanarkshire, on June 1st, 1911, as a nestling. Recovered at Meigle, Perthshire, on December 29th, 1911. Reported by Mr. J. M. Anderson.

LAPWINGS (*Vanellus vulgaris*).—B.B., No. 14322, marked by Mr. J. Bartholomew at Torrance, near Glasgow, Stirlingshire, on June 5th 1911, as a nestling. Recovered at Abbeyleix, Queen's co., on December 24th, 1911. Reported by Mr. M. Brophy.

B.B. No. 14403, marked as No. 14322 on May 29th, 1911. Recovered at Lough Derg, near Killaloe, co. Clare, on February 5th, 1912. Reported by Mr. A. J. Parker.

B.B., No. 13931, marked by Mr. A. Bankes near Harrogate, Yorkshire, on June 6th, 1911, as a nestling. Recovered near Lincoln on January 23rd, 1912. Reported by Mr. C. Wallis.

B.B., No. 13473, marked by Mr. W. T. Blackwood near Peebles on May 24th, 1911, as a nestling. Recovered at St. Hilaire de Riez, Vendée, France, on January 30th, 1912. Reported by M. H. Loiseau.

B.B., No. 8322, marked by Mr. A. Bankes at Salisbury, Wiltshire, on July 11th, 1910, as a nestling. Recovered near the same place the beginning of February, 1912. Reported by Mr. F. Martin.

WOODCOCK (*Scolopax rusticola*).—B.B., No. 12602, marked by Mr. T. Pattison, per Mr. M. Portal, near Carlisle, Cumberland, on May 11th, 1911, as a nestling. Recovered near Witham, Essex, on December 26th, 1911. Reported by Mr. J. O. Parker.

B.B., No. 12610, marked as No. 12602 on May 2nd, 1911. Recovered at Glengoura, co. Cork, on January 8th, 1912. Reported by Mr. J. Lynch.

B.B., No. 12624, marked by Mr. C. Boiston, per Mr. M. Portal, at Dilston, Northumberland, on May 21st, 1911, as a nestling. Recovered at Camolin, co. Wexford, on January 12th, 1912. Reported by Colonel F. Caulfeild.

COMMON CURLEW (*Numenius arquata*).—B.B., No. 22299, marked by Mr. J. D. Patterson at Goathland, Yorkshire, on June 11th, 1911, as a nestling. Recovered on R. Shannon near Limerick, on December 16th, 1911. Reported by Mr. J. J. Casey.

COMMON TERNS (*Sterna fluviatilis*).—B.B., No. 4306, marked by Messrs. Robinson and Smalley, at Ravenglass, Cumberland, on July 30th, 1909, as a nestling. Recovered at Flookburgh, near Ulverston, Lancashire, in September, 1911. Reported by Mr. H. B. Turney. Three others, marked same as No. 4306, in July, 1911, were re-recovered at Flookburgh during the following September.

BLACK-HEADED GULLS (*Larus ridibundus*).—B.B., No. 9415, marked by Mr. J. S. T. Walton at Denton Fell, Cumberland, on June 4th, 1910, as a nestling. Recovered on the R. Humber at Grimsby, Lincolnshire, on February 4th, 1912. Reported by Mr. E. J. Dewing.

B.B., No. 8771, marked as No. 9415 on May 22nd, 1910. Recovered at Bridlington Bay, Yorkshire, during second week of February, 1912. Reported by Mr. G. Grantham.

B.B., No. 24162, marked by Mr. H. W. Robinson at Ravenglass, Cumberland, on June 16th, 1911, as a nestling. Recovered at Tramore, co. Waterford, on February 11th, 1912. Reported by Mr. J. Power.

B.B., No. 24137, marked as No. 24162. Recovered at Llangoedmore, Cardigan, on February 8th, 1912. Reported by Mr. D. J. Reed.

B.B., Nos. 30096 and 30839, marked by Messrs. Robinson and Smalley, at Ravenglass, Cumberland, on June 11th and 13th, 1910, as nestlings. Recovered at Pwllheli, Carnarvon, during first week of February, 1912. Reported by the *Star*.

B.B., No. 22283, marked by Mr. J. D. Patterson, at Egton, Yorkshire, on July 1st, 1911, as a nestling. Recovered on the island

of Flores, Azores, on February 11th, 1912. Reported by Mr. J. Mackay, through Mr. W. C. Tait, who has kindly made the scheme known among friends (as well as in the Press) in the Azores.

COMMON GULL (*Larus canus*).—B.B., No. 21998, marked by Mr. W. I. Beaumont, at Dunstaffnage Isle, Loch Etive, Argyllshire, on June 26th, 1911, as a nestling. Recovered at Newshot Isle, opposite Clyde Bank, five miles from Glasgow, on February 17th, 1912. Reported by Mr. J. L. Robertson.

B.B., No. 9845, marked by Mr. W. I. Beaumont at Stirk Island, Llyn of Lorn, off Lismore, Argyllshire, on July 8th, 1910, as a nestling. Recovered at Stromacroibh, Lismore, Argyllshire, about the third week in February, 1912. Reported by the *Oban Times*.

MARKED ABROAD AND RECOVERED IN ENGLAND.

BLACK-HEADED GULLS (*Larus ridibundus*).—Rossitten, No. 5888, marked as a nestling in Schleswig on June 24th, 1911. Recovered at Brandesburton, Holderness, Yorkshire, on January 15th, 1912. Reported by Mr. S. Duncan.

Rossitten, No. 6839, marked as a nestling at Rossitten, Germany, on July 18th, 1911. Recovered at Eastbourne, Sussex, during first week of February, 1912. Reported by the *Daily Mail*.

Rossitten, No. 5968, marked as a nestling in Schleswig on June 25th, 1911. Recovered at Herne Bay, Kent, end of January or beginning of February, 1912. Reported by the *Angler's News*.

Rossitten, No. 1620, marked in Schleswig in the summer of 1909. Recovered at Chichester, Sussex, on February 1st, 1911.

Museum Leiden, No. 644, marked as a nestling at Kerkererve, Zeeland, Netherlands, on June 18th, 1911. Recovered at Southampton, Hampshire, end of January or beginning of February, 1912. Reported by *Cage Birds*.

COMMON GULL (*Larus canus*).—Rossitten, No. 4975, marked at Lübeck, north Germany, on July 4th, 1911. Recovered at Portsmouth, Hampshire, on February 3rd, 1912. Reported by Mr. S. Webster.

REMARKABLE JOURNEYS TAKEN BY BLACK-HEADED GULLS.

FOR a Yorkshire-bred Black-headed Gull to reach the Azores (*see above*) seems a remarkable journey, but the species is said to be a common visitor to the Azores (*cf. Novitates Zool.*, XII., p. 102) and these birds must come from Europe. Recently I have received a letter from Mr. St. Eval Atkinson, Barbados, West Indies, to the effect that in November, 1911, a gull was

shot in that island bearing a Rossitten ring 6888 or 8889, according to which way up it was read. Mr. Atkinson appears also to have communicated this information to the English Press, while Professor Thienemann has also heard from Mr. L. N. Bowen to the same effect. Professor Thienemann informs me that the number must be 6888, since that is the highest he has yet issued, and that this ring was put on a young Black-headed Gull at Rossitten on the same day as No. 6839, recorded above, viz. July 18th, 1911. Flores, where our Yorkshire bird was got, is nearly half-way across the Atlantic, and bearing this in mind there seems no reason to doubt that the Rossitten bird reached the West Indies by natural means, though seemingly it was an accidental occurrence, and the bird may have been tempted far out of its normal course by following a ship.—H.F.W.

RARE BIRDS AT THE ISLE OF MAY IN 1911.—Miss E. V. Baxter and Miss L. J. Rintoul, to whose good work we have frequently referred, paid two visits to the Isle of May in 1911, viz. from April 27th to May 29th, and from September 8th to about October 6th. From their published results (*Scot. Nat.*, 1912, pp. 53-58) which are given in a most inconvenient narrative form, we extract the following interesting records:

BLACK REDSTART (*Ruticilla titys*).—One, May 11th.

CONTINENTAL REDBREAST (*Erithacus rubecula rubecula*).—One, April 30th, the only Robin seen during the spring visit, while only British ones were seen in the autumn.

LESSER WHITETHROAT (*Sylvia curruca*).—Several, May 9th and May 15th.

BLACKCAP (*Sylvia atricapilla*).—A pair on November 15th.

BARRED WARBLER (*Sylvia nisoria*).—One, September 10th.

CONTINENTAL GOLDCREST (*Regulus cristatus cristatus*).—One, September 29th. Numbers of Goldcrests were seen during September, but all those procured except this one were of the British form, as were all those taken in the spring.

NORTHERN WILLOW-WARBLER (*Phylloscopus trochilus eversmanni*).—One, October 6th.

BRITISH HEDGE-SPARROW (*Accentor modularis occidentalis*).—Some on September 30th, and a few on October 20th.

[I may here note that the British Hedge-Sparrow is a regular autumn-migrant on the south Yorkshire coast.—H.F.W.]

RED-BACKED SHRIKE (*Lanius collurio*).—A pair, May 11th.

MEALY REDPOLL (*Linota linaria*).—One May 13th, one May 14th, two May 15th, and one May 29th.

LAPLAND BUNTING (*Calcarius lapponicus*).—One September 28th, and one October 12th.

CONTINENTAL SONG-THRUSH AND GOLDCREST AT THE ISLE OF MAY.—Mr. W. Evans records (*Scot. Nat.*, 1912, pp. 43-4) that among many examples of the Song-Thrush and Goldcrest taken at various lighthouses in south-east Scotland only one Song-Thrush (end of December, 1910, Barnsness, Haddington), and only one Goldcrest (October 20th, 1911, Isle of May) were of the Continental forms, all the rest being British. Mr. Evans suggests from this evidence that there must be some area on the Continent where birds "indistinguishable from ours are reared." There may be (the British Song-Thrush in any case breeds in Holland), but because Mr. Evans has had so few examples of the Continental forms from these lighthouses, and because the British birds were migrating with Fieldfares, Redwings, and other northern species, seems to us to prove nothing. It is well known that Lights only "attract" birds in certain weather, and the Continental Song-Thrushes may not have been migrating at the time, while the British birds were probably coasting south, and there is no reason why they should not be in the company described. A good many Continental Goldcrests were taken at the Isle of May in the autumn of 1910, and several Continental Song-Thrushes in the autumn of 1909 (*cf.* Vol. IV., p. 291).

CONTINENTAL REDBREASTS IN EAST ROSS.—Miss A. C. Jackson records (*Scot. Nat.*, 1912, p. 67) that she obtained four *Erithacus rubecula rubecula* on the coast near Tarbatness on September 16th, 1911.

LAPLAND BUNTING AT FAIR ISLE.—A male *Calcarius lapponicus* is recorded by the Duchess of Bedford (*Scot. Nat.*, 1912, p. 15) at Fair Isle on October 6th, 1911.

SHORE-LARKS IN HADDINGTONSHIRE.—Mr. W. Evans records (*Scot. Nat.*, 1912, p. 66) that he met with a party of eight *Otocorys alpestris* on November 14th, 1911, near North Berwick.

BARN-OWL NESTING ON THE GROUND.—In his "Zoological Record for Derbyshire for 1911" (*Derby. Arch. and Nat. Hist. Soc. Journ.*) the Rev. F. C. R. Jourdain records the finding of a nesting-place of *Strix flammea* on the ground in a large hollow at the foot of the trunk of an old oak tree.

COMMON SANDPIPER AND LAND-RAILS IN WINTER IN IRELAND.—A specimen of *Totanus hypoleucus* was seen in December, and shot on January 11th, 1912, at Crosshaven, co. Cork. Several specimens of *Crex pratensis* were recorded for the last half of December, 1911 (R. J. Ussher, *Irish Nat.*,

1912, p. 47). Both species not infrequently winter in the south and west of our islands. A Land-Rail was sent to me by Major Barrett-Hamilton from co. Waterford on December 3rd, 1910.—H.F.W.

WOOD-SANDPIPER IN FIFE.—Mr. W. Evans puts on record (*Scot. Nat.*, 1912, p. 16) that he has a specimen of *Totanus glareola* shot near Anstruther, south-east Fife, in April, 1895.

BLACK-TAILED GODWIT IN CUMBERLAND.—Four specimens of *Limosa belgica* are recorded by the Misses L. J. Rintoul and E. V. Baxter from Skinburness (Solway), one on August 27th and three on August 30th, 1911 (*Scot. Nat.*, 1912, p. 45).

WHIMBRELS IN WINTER IN HADDINGTON.—Mr. W. Evans records seeing a *Numenius phaeopus* near North Berwick on November 25th, 1911, and Mr. R. L. Ritchie writes that at Aberlady Bay he saw one in November, and shot one on December 26th, 1911 (*Scot. Nat.*, 1912, p. 45).

BLACK TERN IN HADDINGTON.—Mr. R. L. Ritchie records (*Scot. Nat.*, 1912, p. 45) that he obtained an immature female *Hydrochelidon nigra* at Aberlady on August 31st, 1911.

DISPOSAL OF THE FÆCES OF YOUNG BY OLD BIRDS.—Mr. W. Wilson (*Nat.*, 1912, pp. 50-1), observed that in the Mistle-Thrush, Song-Thrush, Blackbird, and Lesser Redpoll, the *fæces* of the young were both swallowed and carried away by the parent-birds; in the Ring-Ouzel they were swallowed; in the Chaffinch they were carried away (except in one case where the male swallowed one) until a few days before the young left the nest, when they were left and the outside of the nest became foul; in the Redstart, Redbreast, Willow-Warbler, Dipper, Great Tit, Pied, Yellow and Grey Wagtails, Meadow-Pipit, Spotted Flycatcher, House-Sparrow and Starling, they were carried away. These observations should be compared with those published in our last volume. Mr. Wilson suggests that there may be nourishment for the old birds in the *fæces* of the young, which, as I pointed out in 1897, is not unlikely.—H.F.W.

THE BIRDS OF WILTSHIRE.

To the Editors of BRITISH BIRDS.

SIRS,—I should be much obliged if any of your readers would be so kind as to give me any information they can about uncommon birds in Wiltshire during the last thirty years or so.

I am trying to collect data on the Birds of Wiltshire since the publication of the Rev. A. C. Smith's book on the subject.

G. B. HONY.

Woodborough, Wilts.

BRITISH BIRDS

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ON INCUBATION.

BY

ERIC B. DUNLOP.

IN a previous article on this subject (Vol. IV., pp. 137-145), I showed that there is a considerable number of birds which commence to incubate as soon as the first egg has been deposited. The birds which have this habit it will be convenient to term the Ovitegæ; the species which do not sit until the full clutch has been laid, the Ovinudæ. In this paper I shall show how extensive is the former group. Writing of the Raven (*C. corax*) in my last paper, it was suggested that many eggs of this species would be rendered infertile by the elements, if the bird did not sit from the first. Further experience of these birds proves that incubation does begin with the deposition of the first egg. The habit is not only of value to the species in saving the eggs from the effect of frost and snow, but also by protecting them from egg-stealing birds. This was proved in an unusual manner: A pair of Ravens having been disturbed at their nest by a keeper, forsook it; very shortly afterwards the nest was raided by Crows; search revealed the eggs, which had been sucked, on an adjacent hill-end.

In my previous paper, I stated that the Magpie (*P. rustica*) exceptionally covers her eggs from the time the first is laid, but this species undoubtedly belongs to the Ovitegæ. Building of the large nest commonly begins in March, and the trees being then leafless, it is a prominent object, frequently being visible at a distance of fully a mile. Great risk is run thereby from the depredations of egg-sucking animals. If the bird was not constantly present to protect her eggs, it is probable that few would be left to hatch.

The Carrion-Crow (*C. corone*) also commonly sits as soon as egg-laying has commenced and, no doubt, the same is the case with the Hooded Crow (*C. cornix*).

Coming to the Turdidæ, Mr. W. G. Sheldon, writing in BRITISH BIRDS for November, 1911—after stating that the Fieldfare (*T. pilaris*) places its nest in a very conspicuous position—says that “the hen commences to sit immediately the first egg is laid” (p. 153).

The owls (Strigidæ) are ovitegous in habit. In a clutch of two eggs of the Tawny Owl (*S. aluco*) which I watched, one hatched on May 4th, the other two days later. This species frequently lays in old Crows’ nests, and even in a Rook’s nest in an inhabited rookery. The white and conspicuous eggs would remain a very short time if left exposed. The Eagle-Owl (*B. ignavus*) and Little Owl (*A. noctua*) have both been recorded to sit from the first egg. Similar cases have been noted of the Snowy Owl (*N. scandiaca*) in the far north. It is worthy of remark that in confinement the habit remains the same. In the *Zoologist* for 1875, a pair is recorded to have bred in Mr. Edward Fountaine’s aviary: “The first egg was hatched on the 1st of July, the second on the 3rd, the third on the 6th, the fourth on the 8th, and the fifth on the 9th.”*

The Columbidae also lay white eggs, and in many cases in situations resembling those occupied by owls. The analogy is particularly noticeable between the Tawny Owl and the Stock-Dove (*C. ænas*). I have frequently known this pigeon to incubate from the deposition of the first egg. The Ring-Dove (*C. palumbus*) often protects its eggs in like manner, but this is not always the case. Some domestic pigeons whose incubating habits I noted, also varied in this respect. Out of fifteen cases, eleven sat as soon as the first egg had been laid, and four did not incubate until the clutch was complete. The cock as well as the hen sat before the second egg had been laid, in several instances.

* Although it is true that the Barn-Owl in many cases incubates as soon as the first pair of eggs is laid, there are exceptional cases in which the eggs are laid without the big pauses between the pairs, and the difference of incubation is very slight.—F.C.R.J.

Another group which lays white eggs, in holes in trees and cavities in cliffs, is the Psittaci. All those parrots concerning which I have any information relative to their incubating habits, cover their eggs from the laying of the first. No doubt the habit is common to most or all of the species, for it must be of great value in preserving the white eggs from the unwelcome attentions of egg-seeking animals.

When last writing on this subject (Vol. IV., pp. 141, 142) I gave examples of the hatching off of clutches of eggs of the Black-headed Gull (*L. ridibundus*), showing that incubation, in this species, commences as soon as the hen has deposited the first egg. Other species of Larinæ in which I have noted the same habit, are the Great Black-backed Gull (*L. marinus*), the Common Gull (*L. canus*), and the Lesser Black-backed Gull (*L. fuscus*). In all probability the habit is common to the whole subfamily. I have noted the same thing in the case of the Arctic Skua (*S. crepidatus*), and have good reason to believe that the Great Skua (*M. catarrhactes*) does not differ.

It is interesting to find that Mr. F. M. Chapman, in his *Camps and Cruises of an Ornithologist*, writing of the Skimmers (Rhynchopinæ) on Cobb's Island, says: "The four creamy white eggs are conspicuously marked with black, and are by no means difficult to see." Later he states: "The chicks seem to appear on successive days." No doubt these birds are ovitegous.

My experience of the Black Guillemot (*U. grylle*) has been, that incubation begins with the deposition of the first egg.

A bird which commonly lays its eggs in very exposed situations is the Water-hen (*G. chloropus*), and, as might be suspected, this species sits on them constantly.

The Accipitres are ovitegous. The Egyptian Vulture (*N. percnopterus*) has been recorded as covering her eggs from the time the first is laid. The habit is well known in the case of the Sparrow-Hawk (*A. nisus*); the following is an example of the hatching off of this species: The

first egg hatched on June 13th, the second on June 14th, and the third and fourth on June 15th.

The Marsh-Harrier (*C. æruginosus*), Montagu's Harrier (*C. cineraceus*), and Hen-Harrier (*C. cyaneus*) have all been recorded as sitting from the laying of the first egg—at least, as in other cases, I deduce it from the statement that the young vary in size and development. Howard Saunders, in the *Zoologist* for 1875, wrote the following significant passage concerning the nesting of Montagu's Harrier. After the bird had been disturbed from the nest, “when Rooks were about, and particularly if they crossed the line of the nest, she displayed great anxiety, and occasionally made a dash at one or two of those nearest, sometimes uttering a cry something like that of a Kestrel, but feebler and more querulous. There was reason for her antagonism, for both Rooks and Carrion-Crows (there are plenty of the latter in the Island) showed by their movements that they were perfectly aware of the position of the eggs, and I soon learned to dread them more than any prowling cowherds.”

John Wolley recorded instances of the Golden Eagle (*A. chrysaëtus*) sitting with the first egg laid, and it is interesting to note that the same was the case with a pair belonging to the late Lord Lilford, the hen sitting closely at first, and subsequently both sexes by turns.*

There are several records of the Common Buzzard (*B. vulgaris*) incubating from the laying of the first egg, and my experience has been that this is the habit of the species. The Rough-legged Buzzard (*B. lagopus*) and the Honey-Buzzard (*P. apivorus*) have both been noted as sitting closely as soon as the first egg has been deposited, as does also the Kite (*M. iclinus*).

My experience of the Peregrine Falcon (*F. peregrinus*) has been that it is ovitegous. This species lays early in

* Other Eagles in which the young are found in different stages of development and the eggs are not hatched simultaneously, are the Sea-Eagle (*H. albicilla*), the Imperial Eagle (*A. mogilnik*), and the Great Spotted Eagle (*A. clanga*). These I can record from my own observations.—F.C.R.J.

April, and occasionally in March, also not infrequently Ravens nest in the vicinity; early eggs are undoubtedly saved from the effects of frost and snow by the habit, and all from the attacks of the Corvidæ. The variation in the size of the young, produced by their difference in age, has sometimes wrongly been attributed to sex.

The Merlin (*F. æsalon*) also covers its eggs as soon as laid. The following are the data from a nest I watched: May 3rd, one egg; May 4th, two eggs; May 5th, three eggs; May 6th, three eggs; May 7th, four eggs. On the 4th the cock bird was sitting. It is certain that in many species the male assists in incubation before the clutch has been completed.

The Osprey (*P. haliaëtus*) has been recorded as sitting with the first egg.

In the Ciconiiformes all those species respecting whose nesting habits I have information, belong to the Ovitegæ.

The Cormorant (*P. carbo*) and the Shag (*P. graculus*), though the latter often nests in recesses, would soon cease to exist if their light-coloured eggs were exposed for any length of time to the attacks of the more agile gulls. Mr. F. M. Chapman records that the young of Darters (*Plotus*) vary in age in the same nest, and the same is noted of the Boobies (*Sula leucogastra*).

The Common Heron (*A. cinerea*), as previously recorded, incubates as soon as the first egg has been deposited, and undoubtedly so also does the Purple Heron (*A. purpurea*) and the Great White Heron (*A. alba*).

In an article on the Bittern (*B. stellaris*), (Vol. I., pp. 329-334), Mr. E. W. Wade gives a photograph of a nest belonging to this species, and underneath it notes that the nest was visible at thirty paces when the old bird was not sitting. He further notes that some of the eggs in each clutch are more incubated than others, and the young are of unequal size. The Harriers would certainly profit by the absence of this, and allied species, if they left their nests uncovered.

The Spoonbill (*P. leucorodia*) does not leave its eggs unprotected.

Finally, the Grebes (*Podicipedidæ*) are ovitegous. No doubt numerous eggs are saved by the presence of the bird, which would be lost, even covered as they are, if they were left for some days ; for many nests are very exposed, and egg-sucking birds would have their attention drawn to them by the Grebes when in the vicinity of their home. Also, it seems possible, as the eggs are frequently laid almost in the water, that they would suffer from its effects if they were not constantly incubated, although the nest itself generates a certain amount of heat.

NOTES

ISABELLINE WHEATEAR IN SUSSEX.

THE third British example of the Isabelline Wheatear (*Saxicola isabellina*) was secured at Rye Harbour on March 28th, 1912. I examined it in the flesh the next day and upon dissection it proved to be a male. I agree with Mr. Ticehurst (Vol. V., p. 74) that this species is no doubt overlooked, which fact is substantiated by both this and the specimen recorded by himself being shot by the same man, who was on the look out for this species.

H. W. FORD-LINDSAY.

PROBABLE NORTHERN LONG-TAILED TITS IN ESSEX.

I SAW on March 22nd, 1912, in the parish of Bradfield, Essex, a pair of white-headed Long-tailed Tits. I had them under observation for about ten minutes, sometimes within ten yards of me, using a pair of Voigtländer prism binoculars magnifying twelve diameters. One bird had an absolutely white head, the other I am not quite sure about, but if it had any stripe on the head at all it must have been very faint. The white head of the one I saw best was quite clean-cut from the back—I mean, there were no stripes where the head and neck joined the back and sides. The whole bird seemed lighter and brighter than our English birds in general; the breast and under-parts much whiter, the red on back and shoulders more vivid. The tail seemed to me longer, but it is very difficult to judge on such a point.

I have never been in northern Europe, and have no skins to refer to, but the birds were strikingly different from any Long-tailed Tits I have seen before. I may say that what attracted my attention was their note—a harsh “chissick,” something like that of a Wagtail. They were flying fairly high when I heard the note first, and dropped down into a stunted oak on the shore of the estuary (Stour). I think there can be little doubt that they were *Acredula caudata caudata*.

WALTER B. NICHOLS.

BRITISH WILLOW-TITS IN CHESHIRE, LANCASHIRE AND WARWICKSHIRE.

ON April 17th, 1912, I watched a Willow-Tit (*Parus atricapillus kleinschmidti*) in an excellent light in a wood at Rostherne. I noticed the cap first; it was distinctly brown-black and not sooty-black. I then saw the pale edgings to

the secondaries quite distinctly, but they were not so markedly distinct as to make me imagine that the bird might be a Northern Willow-Tit. When it spread its tail as it was balancing on a slender twig of a birch, I could see the rounded shape. I recorded the species for Lancashire from a bird in the Warrington Museum, but this is the first Willow-Tit I have seen or heard of in Cheshire. There was a second Tit with it, but I did not see it clearly enough to be sure about its identity; I believe that it was another Willow-Tit.

A pair of Marsh-Tits are nesting in the same wood, and I have for some time been carefully observing every Marsh-Tit in this wood and in the neighbourhood, in the hope of identifying a Willow-Tit. I feel confident in asserting that the Marsh-Tit is by far the commoner bird of the two in Cheshire.

T. A. COWARD.

THE Willow-Tit (*Parus atricapillus kleinschmidti*) not having yet been recorded from Warwickshire, it is interesting to note that Mr. H. F. Witherby has pronounced two skins, which he has kindly examined for me, to be of this species; both are Warwickshire specimens, being respectively an adult female, Earlswood, December, 1893, and an adult male, Kenilworth, December 25th, 1911. They belonged to Mr. T. Ground, who has very kindly given me the 1911 specimen, while the other remains in his collection.

A. GEOFFREY LEIGH.

ON April 18th, 1912, in Boggart Hole Clough, one of the Manchester Public Parks, I saw two birds which I concluded were Willow-Tits (*Parus atricapillus kleinschmidti*). I watched them for some time at a distance of a few feet, feeding on the ground, and on a willow tree, and noticed that the crown of the head was unmistakably brown-black, quite different from the glossy black of the Marsh-Tit, being dull in appearance and giving the impression of being far less clear-cut along the edges of the crown than in a Marsh-Tit. The tail seemed to be rounded, and the light edges to the secondaries made a noticeable light buff or yellowish mark on the wings, when seen at close quarters. One bird seemed to have rather more brown in the crown than the other. They continually uttered a high thin note. In general appearance they looked altogether duller than Marsh-Tits.

A. W. BOYD.

THE GREEN WOODPECKER'S METHOD OF EXTRACTING LARVÆ FROM WILLOWS.

THE occupation of a basket-maker in north Norfolk has made it necessary to acquaint myself with the production and cutting of osiers in all their stages. The pursuit of this work

has given me many opportunities for noticing a circumstance in the life of the Green Woodpecker (*Gecinus viridis*) which hitherto I have not seen noticed. It is the method by which this bird extracts the larvæ of some kind of moth from growing osiers or willows. I have never known these larvæ to be found in willows less than two years old and in plants of that age the larvæ are small, whereas in willows of three and four years



TOP, APERTURE MADE BY WOODPECKER; BOTTOM, EXIT
BORED BY GRUB.—*Natural size.*

old they are as large as in those of eight years old. Above this age I have had no experience. How the grub gets to the inside of the growing willow I could never ascertain, but as many of the shoots spring from stumps that are partly decayed, it is highly probable that the egg from which the grub is hatched is deposited in a decayed part of the stump, from which position the grub could easily work its way beneath the growing willow and take up the position in which I have invariably found it, namely in the centre. I have

always found that the grub is situated in a soft kind of willow, the hard ones being avoided, apparently for several reasons; first, the hardness of the wood; second, the soft willows are probably nicer to the taste, and more easily gnawed; thirdly, there is much more pith in the soft than the hard willows, and as this is always gnawed out it may form the principal food of the grub. I am strongly inclined to think that the grub belongs to the hornet moth (*Trochilium apiformis*). It is a rather sickly yellowish-white colour, varying slightly with the age and quality of the wood in which it is found, the head being of a rich chestnut-brown. I have always found them head upwards, which has led me to think that they cannot turn in their holes, and in this position they avoid their own droppings which accumulate in the abandoned part of their tunnels. As stated, the grub's method of ingress can only be assumed by me, but of its egress I can with certainty mention two ways. In one, the insect gnaws its own way out; in the other, it is assisted by the Woodpecker.

How the Woodpecker locates the grub is somewhat of a mystery, but this it does with unfailing certainty, and often effects the capture of the grub with a single perforation; sometimes two are necessary, and on very rare occasions three are found—one, however, being most frequent. When two or three perforations are made, I am inclined to think that the grub inside the willow is alarmed at the hammering of the bird outside, and moves to escape capture, rather than attribute two or three punctures to the inability of the bird to find the exact spot which the grub occupies. The holes made in the willows by the Woodpecker vary according to the thickness of the wood through which the bird chips its way to the grub; thick pieces making larger holes necessary to enable the bird to work. As already stated, I do not know how the bird finds the situation of the grub, but I have never seen holes chipped in the wood by the bird without evidence of the grub having been there, and its removal has been just as certain. The holes made by the bird are all similar in shape, the long way of the hole being always vertical, and the wood removed in making it is chipped and splintered from its sides in small pieces, which run with the grain, and then broken off at top or bottom, whilst those made by the grub are all round, and about the same size. What has been written thus far applies to shoots of willow that are growing, but old and decayed stumps often hold several grubs at one time. There, of course, they cannot gnaw or feed on the pith of the wood as when the wood is small and only one grub is

found in a shoot, but in both cases the bird's method of procedure is the same, although its object seems more easily attained where the wood is decayed.

The grub does not seem to affect the growth of the shoots, and I could never find external evidence as to whether a grub was inside or not, and to me it is a complete puzzle how the bird ascertains which shoots contain grubs when thousands of the unaffected shoots are growing side by side and many of them so much alike that it is impossible for a man to find any difference in them. I have occasionally found traces of two grubs in one hole, one grub having been removed by the bird whilst the other has gnawed its way out. In this case it seems that grub number one has been assisted from his lodgings, whilst number two appears to have eaten his way through the wooden walls. My reasons for supposing this are that if left entirely to itself the grub always eats its way out at the very top of the central burrow, quite horizontally; it is there, too, that the grub is mostly taken by the bird, and its career as a living entity ceases. The second grub, finding itself in the tunnel already made, gnaws its way out much lower down. It also seems to me that the bird searches for the chrysalis with even greater success, as this is invariably lodged near the bark. Here I have never seen more than one hole made by the Woodpecker, and that a comparatively small one, as in this stage the insect appears more easily extracted, but the character of the hole made by the bird is unmistakeable.

J. W. SMALLS.

DOES THE MALE OR FEMALE WOODPECKER BORE THE NESTING-HOLE?

CAN any of the readers of *BRITISH BIRDS* inform me whether it is only the female Woodpecker which bores the hole for the nest, or whether both sexes take a share in this operation?

F. TAPSELL.

[Reliable modern observations on the share of boring by the sexes of the British Woodpeckers seem to be very scanty, which is the more remarkable as they can be distinguished without difficulty. Naumann implies that both sexes of Green Woodpecker bore, though he does not definitely state the fact. Boring in the case of the Lesser Spotted Woodpecker is said to be performed by both sexes (Messrs. Walpole Bond, C. Dixon, etc.), but fresh observations on this point are much needed. Mr. Harting quotes an anonymous observer who saw both sexes of Green Woodpecker working hard at a hole, the first piece of bark being removed by the hen, and the

hole completed after two days work. Possibly this case was exceptional, and the bird may have been ejected from a hole when about to lay. The male of the Continental Green Woodpecker, which probably does not differ in its habits from the English bird, has been observed in the act of boring by Herr C. Loos, and most Continental observers ascribe the greater share of the work of nest-boring to the male Woodpeckers in other species.—F. C. R. JOURDAIN.]

ACTIONS OF A KINGFISHER ON THE WATER.

WHILE fishing in Ynisyfro Reservoir, near Newport, Monmouthshire, on March 20th, 1912, I noticed a bird on the water about one hundred yards from land. It was making its way rapidly to the side by a series of hops—something like a stone thrown along the surface—striking the water and bounding up again with the aid of its wings. After about a dozen such hops it would sit on the water to rest. I thought it was a starling, and watched carefully, to see if it could swim, but am certain that it made no attempt to do so. Upon reaching the place where it landed, I found it was a Kingfisher (*Alcedo ispida*). Its neck and one wing were injured—I think by flying against a telephone wire that runs near the pond—and it could not fly. Its feathers were hardly wet.

R. C. BANKS.

[On one occasion a young Kingfisher, not long out of the nest, came flying round a corner where I was standing. It turned away rapidly, but flying low struck the water, and was unable to recover itself, flapping along the surface and half turning itself in the water with each stroke. It was only with the greatest difficulty that it managed to reach the opposite bank. As far as I could see it appeared to be very wet, but as it was able to fly away before I could reach it, I had no opportunity of handling it. No attempt whatever was made to swim, the bird sitting half submerged in the water, when it paused for a moment from exhaustion.—F. C. R. JOURDAIN.]

LITTLE OWL IN SOUTH DEVON.

I WAS informed by Lieut. H. Wells, R.N., that while he was shooting in November, 1911, along the cliff at Thurlestone, south Devon, a Little Owl (*Athene noctua*) flew out right at his feet. He refrained from shooting it, but had not the slightest doubt about the identification, having often come across the bird out of England.

A. H. MACHELL COX.

SUPPOSED FORMER ABUNDANCE OF THE GLOSSY IBIS

IN connexion with the note in last month's BRITISH BIRDS (p. 307) on the above subject by Mr. Gurney, the following may be of interest :—

On September 13th, 1906, I was following otter-hounds at Wangford in Suffolk, and while hounds were drawing a piece of marshy swamp, four of these birds were seen. They rose and flew round, coming quite close over members of the Field, several times. At the time I was standing near an old yokel, and I turned to him and asked him what he called them, and without a moment's hesitation he replied : " Well, we used to call 'em black curloo," and he went on to tell me that he " minded " a time when they were common. The next day I happened to be at a place on the Aldeburgh river, about twenty-one miles from Wangford, and I was informed that somewhere about a fortnight before a couple of these birds had been shot out of a flock of six ; in all probability the same lot as I saw at Wangford. This old man's remark about the name seems to go to prove that the idea of the local name of " black curlew " is not so unlikely as Mr. Gurney suggests.

E. FRASER STANFORD.

MOVEMENTS OF BRENT GEESE ON THE COAST OF NORTHUMBERLAND.

THE following notes on the movements of Brent Geese (*Bernicla brenta*) during the recent cold weather on the south-east coast of Northumberland may be of some interest, as so little appears to be recorded concerning the movements of Geese :—

Jan. 23rd, 1912. Very fine. Wind N.E. up to 3 p.m., then heavy gale from east with much rain and sleet. Cullercoats, 3.15 p.m. Gale increasing. Flock of twelve—fifteen Brent passing north, close to shore. 3.30. Gale subsided, rain continuing.

Feb. 2nd. St. Mary's Island. Last night extremely cold with much snow. 2 a.m. Wind N.E. increasing to gale. Severe blizzard at daylight. 9.45 a.m. Flock of twelve Brent passed north, battling hard against the wind, and went over the island. H. V. Charlton shot one, an adult male of the light-breasted form (*B. b. glaucogastra*). 10.15 a.m. Another flock of ten-twelve flying in exact track of former. Both skeins flew some six yards from the surface of the water, but on passing over the island they rose to height of forty-five feet. They followed the trend of the coast-line, as much as possible, making no direct course. My brother procured an

immature male of the light-breasted form from the last flock.

Feb. 3rd. Wind N.E. by E. Very heavy gale, worse than yesterday. Frost 13° last night. More snow. 10.45 a.m. Skein of fifteen Brent hard pressed by weather and forced back. They circled round high up twice, then attempted to face the wind again and passed to the north. 10.50. St. Mary's Island. Two shot from flock of ten-twelve. 10.55-11.10. Several small parties of five to fifteen going north passed close to the breakers. 11.45. Flock of fifteen. 11.55. Two passed over; one shot by my brother, an adult female of the light-breasted form. 12.10 p.m. Flock twelve-fifteen. Storm abating and consequently the Geese keep farther from land, passing close over the sea. Many hundreds passed all the rest of day, out to sea.

Feb. 4th. 9 a.m. Wind W. Foggy. Two Brent passing south. 9.50. Flock going north close by shore.

Feb. 5th. Twenty to twenty-five passing north. Mild and foggy. Wind S.E. None of the flocks seen had more than twenty-five birds in them.

Brent have been exceedingly numerous this winter at Holy Island, and shoulder-guns have probably done better than ever known before. A friend of mine got six in two days' shooting during the heavy south-easterly gale of January 16th and 17th. A notice in the *Newcastle Daily Journal*, February 7th, states: "Brent Geese are here (Holy Island) in large numbers, and are more easily captured than I have known for several years. There has been quite a harvest for the local sportsmen." This has reference of course to the punt-gunners.

In the *Shooting Times* it is stated that it is some four winters since there was even a fair show of Brent at Holy Island, and the luck of shoulder-gunners this year is also mentioned, one man having got as many as twenty in a few days. Thus it appears that the Brent have been there in record numbers this year. From the records I can obtain for my own district it is about twenty-seven years since a migration in any numbers was observed there: one of the years in which the abundance of this species was noted at Holy Island by Mr. Abel Chapman.

I am of opinion that migration does not take place close up this coast except under abnormal conditions. It is probable that the birds pass north several miles out to sea, or possibly when the weather is settled they make a line from their quarters on the Continent and cross directly to Holy Island (undoubtedly the destination of the flocks seen by us).

J. M. CHARLTON.

EARLY NESTING OF COMMON SNIPE IN WILTSHIRE.

THE Snipe (*Gallinago caelestis*) began their spring call and to "drum" at Downton on February 16th, 1912—at least, that was the first time I heard them. I have noted the call, but never, I think, the "drumming" earlier in the year. On March 15th my man reported to me that he had flushed a Snipe off three eggs, and on April 2nd two young ones were hatched. This seems to be a very early date.

F. G. PENROSE.

[Dr. Penrose's date is early, but not unprecedented. In Mr. Abel Chapman's *Bird-Life of the Borders*, 2nd ed., p. 51, he states that he has known of a nest (presumably with eggs) as early as March 19th, and of young Snipe on the wing by the end of April. This is the more remarkable, as unlike Dr. Penrose's record, it comes from a northern county. In Dorset Mr. A. G. Cowie recorded a nest with four eggs on March 31st, 1911 (*Field*, May 6th, 1911).—F. C. R. JOURDAIN.]

SALE OF TWO EGGS OF THE GREAT AUK.

ON April 17th, 1912, Mr. J. C. Stevens sold at 38, King Street, Covent Garden, two eggs of the Great Auk (*Alca impennis* Linn.), both of them the property of Lady Greville Smyth, of Ashton Court, Somerset.

The first specimen offered (Lot A) was one of the two eggs purchased at an auction in Kent, and exhibited by me at the meeting of the British Ornithologists' Club on April 18th of that year, and whose history, so far as I could trace it, was given in the *Ibis* for 1894, pp. 422-3. It was the second of the two eggs sold on April the 24th, 1894, and was purchased by Mr. Henry Munt for £183 15s. On June 20th, 1900, it was again put up for sale at these rooms, and purchased by Mr. James Gardner for the late Sir Greville Smyth, Bart., the price paid being £189. On this its third appearance it was purchased for £157 10s. by Messrs. Rowland Ward, Limited.

I much regret that in some of the accounts of this auction this egg has been confused with the other specimen sold on April 24th, 1894, which was bought by Mr. Herbert Massey, of Didsbury, for £273, in whose collection it still remains—an error which I fear may give great trouble to future historians of the remains of this extinct bird.

The second egg (Lot B) was exhibited by me at the meeting of the British Ornithologists' Club on March 13th, 1912. Very little of its history is known. Many years ago Sir Greville Smyth purchased a box of seabirds' eggs from Mann, a Natural History dealer at Clifton, and on

unpacking them found this egg. He placed it on one side for further examination, but omitted to do so, and the egg was overlooked until 1900. In the *Ibis* for that year I described it, *vide* p. 694, but was under the impression at the time that it belonged to Mr. Gardner, who showed it to me and kindly allowed me to have it photographed. It also was purchased on April 17th, 1912, by Messrs. Rowland Ward, Limited, but only realised £147. EDWARD BIDWELL.

THE 1912 "WRECK" OF THE LITTLE AUK.

SCOTLAND.—An excellent general account of the visitation as it affected Scotland is given in the April issue of the *Scottish Naturalist* (pp. 77-81). The bulk of the records are stated to have occurred during and immediately after the fierce easterly gale of January 15-18th, while by February the majority had disappeared. Further south, however, it will be remembered that even greater numbers occurred in the first week of February than in January, and this was apparent even as far north as Northumberland (*cf. supra*, pp. 309-10), while the majority of inland English records were early in February. Even as early as the middle of November and onwards until the January gale Little Auks were noted in the Orkneys and Shetlands as being present in "great numbers," and in December and January a good many were recorded on the coasts of the mainland down to the Clyde and the Forth, but chiefly on the east side. The gale in the middle of January brought hundreds to grief on the east coast from Shetlands to Berwick, and they seem to have been in greatest numbers in the Firth of Forth, where on January 18th—the last day of the gale—hundreds were seen about the May and around the Bass, while during the next few days the tide washed them up in "dozens" on the shores of the Forth. On the 19th three or four hundred appearing to be very tired arrived at the Bell Rock. Many single birds were driven inland, and indeed right across the country, records coming from Perth, Stirling, Dumbarton, Renfrew, Lanark, Wigtown and other counties, between January 20th and 27th.

As compared to the visitation of 1894-5 it is stated that fewer records have come from districts north of Forth and Clyde, but they have extended further south-west. Almost all the birds examined were in an emaciated state, and contained no food.

It seems probable that the January gale in Scotland drove the bulk of the birds south, for large numbers were passing south on January 18th, on the Northumberland coast (*supra*, p. 309), and they were first noticed in Yorkshire and Norfolk

on the 20th (pp. 283, 285). Then came the blizzard of February 1st and 2nd which swept great numbers on to the English coasts, while during the week or so following they were picked up, as our records witness, in all parts of the country, including, and north and east of, the counties of Sussex, Surrey, Buckingham, Gloucester, Worcester, Shropshire, Cheshire, and Lancashire.—H.F.W.

WESTMORLAND.—On February 8th a male just dead was found on the moor at Kirkby Lonsdale. On February 7th a keeper saw about thirty flying across the moor in a S.S.E. direction. They passed quite close to him (Hulme Wilson).

DERBYSHIRE.—One at Sawley Common on January 25th and one at Shardlow on February 18th. At least a dozen were taken in the county between January 25th and February 18th (F. C. R. Jourdain).

STAFFORDSHIRE.—One at Freeford Hall, Lichfield, on January 20th (J. R. B. Masefield).

NOTTINGHAMSHIRE.—Seventeen picked up in the county, all on the high roads (J. Whitaker, *Field*, 30.III.1912, p. 647).

ESSEX.—One alive on the water near Foulness Island, February 8th (F. J. Stubbs, *Zool.*, 1912, p. 157).

FULMARS BREEDING IN ORKNEY.

WITH reference to the notes on this subject (*antea*, pp. 198, 228, 287), I was on the west coast of the mainland (at Birsay), in 1908, and then made inquiries about the Fulmar, and from what I could learn then there were a few at Stromness, and a colony at Costa Head. I saw two flying near the Brough of Birsay. In 1910 I found a small colony on the cliffs to the north of Marwick Head, and in 1911 there was a considerable increase there.

W. J. BALFOUR KIRKE.

[Several pairs were recorded as breeding at the Black Crag near Stromness in 1907, *see* Vol. II., p. 374, but I did not see any there in 1908.—N.F.T.]

UNCOMMON OCCURRENCES IN WEST SOMERSET.

CHIFFCHAFF (*Phylloscopus rufus*).—One was shot at Blackford on January 16th, 1912, and another on March 4th.

CROSSBILL (*Loxia curvirostra*).—A female was picked up in Blackford in the autumn of 1897 (?). It had sustained injuries to one of its wings.

GREAT SPOTTED WOODPECKER (*Dendrocopus major*).—A pair visited Blackford in the autumn of 1905. *D. minor* is fairly plentiful in the neighbourhood.

LITTLE OWL (*Athene noctua*).—A female was shot at East Cranmore (East Somerset), on December 14th, 1911.

HEN-HARRIER (*Circus cyaneus*).—Seen in the early part of 1912, probably on two or three occasions, on Tealham Moor (Wedmore). A local gunner was about to recover a Lapwing which he had shot, when, to quote his own words, “a large hawk, nearly all white, came along and took it away.” This is probably the same bird which I saw on February 5th, and which another man saw later in pursuit of a “black and white curre” (Tufted Duck).

MERLIN (*Falco æsalon*).—A female was shot at Blackford on January 18th, 1907. I saw another on Stoke Moor (Wedmore) in the winter of 1909.

BITTERN (*Botaurus stellaris*).—A male was shot on Wedmore Heath on December 28th, 1906. Three of these birds have been taken in this neighbourhood during the last twenty years, and one was seen on Stoke Moor (Wedmore) in the early autumn of last year.

PINK-FOOTED GOOSE (*Anser brachyrhynchus*).—One was shot on Wedmore Heath on January 15th, 1905. I saw a “plump” of eight on the Moor on January 17th, 1905.

GOLDEN-EYE (*Clangula glaucion*).—A female was shot on Tealham Moor on October 27th, 1910. Two more females were shot on the moor on February 5th, 1912, and two more, probably females, were seen later.

COMMON EIDER (*Somateria mollissima*).—A female was shot on Steart Island (Burnham) on November 29th, 1911, while a male was shot a few days previously. Both were in extremely poor condition.

SMEW (*Mergus albellus*).—Two females were shot on Tealham Moor (Wedmore) on January 4th, 1907. Another (a young male or adult female) was shot in the following winter.

QUAIL (*Coturnix communis*).—A female was shot on Tealham Moor on October 14th, 1911.

SPOTTED CRAKE (*Porzana maruetta*).—One was shot on Wedmore Heath on January 13th, 1905. The date of capture is interesting.

GREAT SNIPE (*Gallinago major*).—One, on Tealham Moor in the winter of 1906 (?).

BAR-TAILED GODWIT (*Limosa lapponica*).—An immature female was shot on Wedmore Heath on January 18th, 1912.

COMMON TERN (*Sterna fluviatilis*).—An immature female was shot on the Gore Sands (Burnham) on October 21st, 1909.

LITTLE GULL (*Larus minutus*).—An immature male was shot off Burnham on October 23rd, 1903.

GREAT SKUA (*Megalesiris catarrhactes*).—A female was shot on the Gore Sands on October 25th, 1909.

LITTLE AUK (*Mergulus alle*).—I saw one on the Gore Sands in the autumn of 1909.

SLAVONIAN GREBE (*Podiceps auritus*).—An immature male was shot off Burnham on February 2nd, 1912.

F. H. L. WHISH.

RECOVERY OF MARKED BIRDS.

Corrections.

ROBINS (p. 312). No. F589, was marked and recovered on the dates recorded by Mr. J. R. B. Masefield, at Cheadle, Staffordshire, *not* by Mr. Leigh at Hampton-in-Arden.

No. D325 was marked by Captain Seppings on January 29th, 1912, *not* June 29th, 1911.

No. C405 was recovered on December 8th, *not* November 8th, 1911.

REED-WARBLERS IN IRELAND.—During a stay at the Tuskar Rock off the coast of Wexford in September and October, 1911, Professor C. J. Patten obtained two specimens of *Acrocephalus streperus* out of a party of five on September 19th (*Irish Nat.*, 1912, p. 50). Professor Patten announces these as the first occurrences of the species in Ireland, but in the next issue of the same journal (p. 84) he writes that a previous record by Mr. Barrington had escaped him, but he makes a further mistake in stating that this record had not been referred to in BRITISH BIRDS, whereas it was mentioned on p. 408 of Vol. II. Professor Patten also obtained a young Wagtail, which he thinks is a specimen of *Motacilla flava*, on September 12th, 1911, and a Skylark which he considers to be *Alauda arvensis cantarella*, on October 5th, 1911, but he promises a further report on the identification of these two birds. It would seem more likely that the Skylark is an example of *A. a. cinerea*, the eastern form, which has been taken at Fair Isle (February 24th, 1906), than the very similar south European form *A. a. cantarella*.—H.F.W.

SWALLOW IN CORNWALL IN FEBRUARY.—A solitary Swallow (*Hirundo rustica*) was observed at Falmouth from February 29th onwards (N. Greaves, *Field*, 23.III.1912, p. 596). This bird may have wintered somewhere in the neighbourhood.

MEALY REDPOLLS IN LANARK.—A small flock of *Linota linaria* was seen at Stepps on January 7th, 1912 (J. Paterson, *Glasgow Nat.*, 1912, p. 63).

SHAGS IN YORKSHIRE AND DERBYSHIRE.—In connexion with the appearance of Shags in Cheshire, Yorkshire, and Worcester-shire* already reported (*supra*, pp. 279 and 307), it is interesting to note that one was seen to go down to a mill-dam near Bradford on January 25th, and was captured two days later (H. B. Booth, *Nat.*, 1912, p. 126). Mr. Coward writes that he subsequently found the remains of a second Shag on Rostherne Mere, which he had probably missed seeing when he found the first, reported on p. 279. Mr. J. Drury informs Mr. Jourdain that a Shag was sent to Messrs. Hutchinson for preservation on January 31st, from near Bakewell.

BITTERN IN ARGYLLSHIRE.—An example of *Botaurus stellaris* was found dead on January 17th, 1912, at Oban (C. H. Bisshopp, *Scot. Nat.*, 1912, p. 67).

GOOSANDERS IN DERBYSHIRE.—A pair of *Mergus merganser* were observed for two or three weeks in March, 1911, on the ponds at Osmaston Manor near Ashburne (F. C. R. Jourdain, *Zool. Rec. for Derbyshire*, 1911).

PLUMAGE OF THE YOUNG RED GROUSE.—In an interesting article on the "Red Grouse in Confinement," in the *Avicultural Magazine* (Third Series, Vol. III., pp. 92-6), Mr. H. Wormald remarks that: "Young Grouse grow three tails in succession before they are five months old, i.e. their first baby-tail, which shows when the chicks are nine days old. This is retained until the birds are a fair size, and then replaced by a black tail, which they wear until after they are quite full-grown, and is dropped about the middle of September, the outer feathers on each side being the first to fall out. In about a month's time this tail is fully developed, and is black, and the feathers stronger in the quill than the feathers of the second tail were. This tail is worn until the moult of the following year."

BLACK-TAILED GODWIT IN DONEGAL IN WINTER.—A specimen of *Limosa belgica* was shot on January 23rd, 1912, at Inch, Lough Swilly (D. C. Campbell, *Irish Nat.*, 1912, p. 64).

BLACK-NECKED GREBE IN EAST ROSS.—An example of *Podiceps nigricollis* is recorded by Miss A. C. Jackson (*Scot. Nat.*, 1912, p. 67) from Cromarty Firth, Jan. 2nd, 1911.

SLAVONIAN GREBE.—A considerable number appear to have been driven on to our shores and inland this winter, and we shall be glad to have records of occurrences.—EDS.

* Mr. J. Steele Elliott writes that this record must be counted to Shropshire, as the Worcester boundary is half a mile from the place where the bird was obtained.



REVIEWS



The Migration of Birds. By T. A. COWARD. Cambridge University Press. 1s. net.

WE suppose that there are few studies in Natural Science that lend themselves more to theorizing than the origin, cause, and paths of those complex movements of birds which we call migration. Mr. Coward (whom we associate with the excellent *Fauna of Cheshire*) in his preface seems cognizant of this, and does not pretend that this little book is more than a "manual," giving an outline of some of the chief theories culled from various sources, with some elaborations and interpretations of his own; therefore it is with no surprise that we find in it little or nothing that is new, and that once more we realize how much at present speculation—good, bad, and indifferent—has to take the place of exact knowledge. The absence of the personal element, the outcome of first-hand observation and knowledge, in the book is, however, in our opinion regrettable, even though the intention of this manual is only to set forth the main features of the subject. We are glad to see that the author realizes the utility of studying geographical races in connexion with migration—an inestimable help which many seem slow to recognize.

The old theory that those birds which go farthest north in summer go farthest south in winter, seems to us to be by no means proved, for though the theory has support in the known habits of some species, such as the Knot, it is not confirmed by our knowledge of the movements of other species, such as the Snow-Bunting, which even in north Greenland is partially resident, and partially migratory. Chapter II. deals with the cause and origin of migration, and in it we find various speculations, some plausible, some not, and none capable of proof, as can only be expected in our present state of knowledge. In this section, we find one or two loose statements. Thus on page 21 we are told that "intense love of home during the spread of glacial conditions would tend rather towards extinction than formation of new habits," and two species which are cited as having thus become extinct are the Great Auk and the Labrador Duck, both of which, it is well known, became extinct through human agency, and, moreover, the latter bird was a migrant, and neither ranged very far north. A little further on we read that we may conclude that the habits of our *summer* birds in their winter

home "are similar to those of our *winter* visitors to Britain"—we should not have thought that the two were in the least comparable.

We quite agree that the supposition that some birds are wintering here during our summer and have bred in the Southern Hemisphere during our winter, is hardly supported by known facts, but we do not agree that it is even a "possible explanation" of the presence of sexually mature non-breeders in our breeding-season, as it seems highly improbable that any bird should breed in its winter-plumage.

Mr. Coward seems to scout much of Gätke's work, but one must always realize that Gätke lived in an "area of concentration" of bird-migration, and consequently had unique opportunities of observation, and although he was prone to exaggerate and build up theories on insufficient data, his labours and enthusiasm did so much to stimulate the study of migration, that his statements must not be rashly set aside for those of others with less experience. Thus, Mr. Coward, after dealing rather hardly with Gätke's statements, appears to accept (page 45) that of another observer who "for forty hours" was "passing beneath the lines of an army of (unseen) migrants, say 500 miles in width."

The height at which birds migrate has always been a source of speculation, and we do not consider it at all proved that birds fly at the great altitude with which they have been credited. The well-known and praiseworthy efforts of the American observers to estimate the height by observations through astronomical telescopes must, we think, be open to doubt. The reviewer some years ago watched through the Northumberland telescope in the Cambridge University Observatory migrating birds passing across the moon, but found that when it came to calculating the altitude of the bird, a very small inaccuracy in estimating the apparent and actual size of the object made a very great difference in the result.

Dealing with that mysterious faculty of birds called "orientation"—if there be such, and we see no better explanation—the author quotes the extremely interesting experiments of Dr. Watson with the Sooty and Noddy Terns at the Tortugas, but tells us also not too convincing a story of the "homing" of a farm-yard duck. The recognition of land-marks by migrating birds is also said to be a guide, but it seems hardly necessary, if a bird can find its way for the first time by "orientation," that on succeeding journeys it should be helped by familiar landmarks. Besides,

it is crediting a bird with such marvellous memory for detailed observation as no human being would have.

Mr. Coward seems to doubt the existence of an east to west migration across the North Sea, but one of the commonest migrations to be seen on our east coast is the arrival of Rooks, Crows, etc., in autumn, *from* the east, and their departure *to* the east in the spring; moreover, Gätke's "absurd statements" as to the leeward drift of these birds in a strong wind can be verified every year by any one who takes the trouble. The author further thinks that the recovery of a few Hooded Crows in localities *not* due east or west of where they were "ringed," proves "conclusively the fallacy of Gätke's due east to west flight." This we consider a serious blunder, as insufficient data has been obtained, and he does not seem to realize the possibility of more than one route for this species. Another serious error into which the author needlessly falls is in saying that the Greenland Wheatear winters in *east* Africa, even to the south of the Equator, whereas, as is well known, the majority of these birds winter in the Senegambia and Senegal districts of *west* Africa; in passing we may note that we know of no proof that this race "loiters through Britain," though it is a well-known bird-of-passage. A small error we may note is that Puffins certainly do not invariably migrate "by slow nautical stages, swimming and feeding as they go," since many of these birds are found in the Mediterranean in the early spring, many hundreds of miles from their nearest breeding-places, and we have witnessed in that sea in April a very strong determined migration by flying.

At the end is a bibliography of some of the more-known articles dealing with bird migration, and an index is also appended.

In spite of many statements open to a difference of opinion, and some blunders, this little book will be undoubtedly useful to those who are beginners in ornithology or know nothing of migration, for whom the book is evidently primarily intended.

C. B. TICEHURST.

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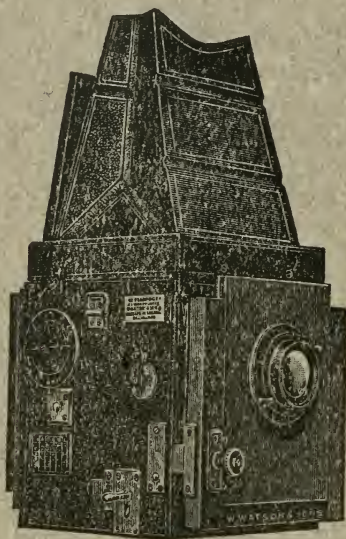
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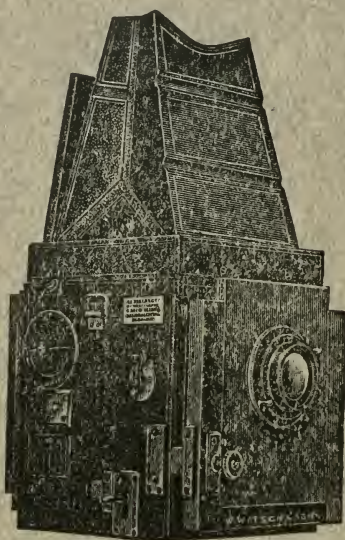
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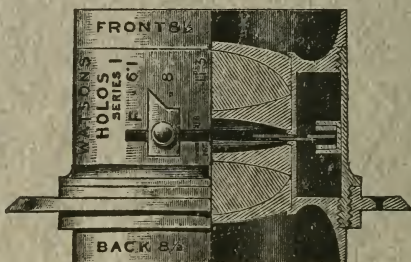


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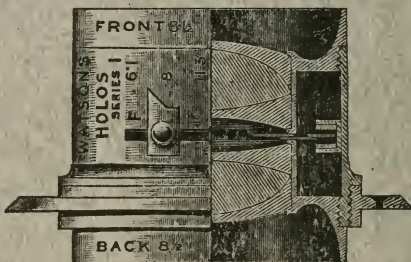


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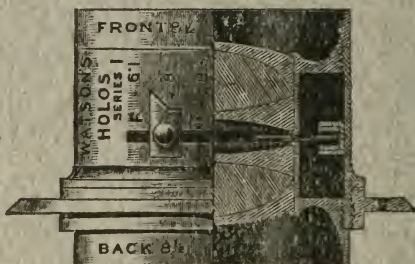


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